The OIL WEEKLY

10¢ A COPY

Exclusively Devoted To The Production and Transportation of Oil and Gas

January 13, 1928 **Volume 48. No. 4**

2,030 MEN, More than 7 ACRES of Floor Space *Back of* HUGHES SERVICE

HOUSTON PLANT

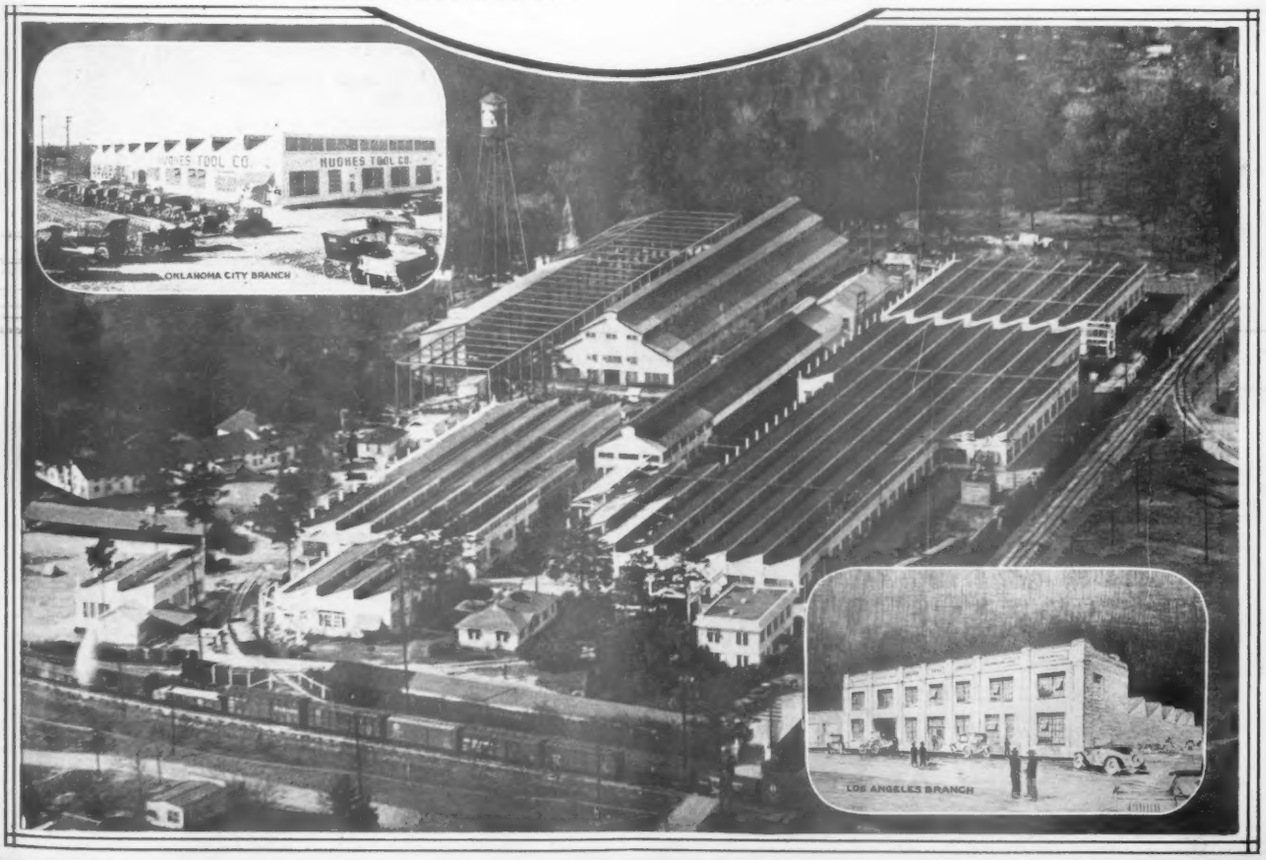
Divisions	No. Men Employed	Sq. Ft. Floor Space
Rock Bit Department	641	72,000
Tool Joint Department	178	42,000
Drilling & Refining Valve Department	126	28,000
Foundry	144	41,200
Forge Shop	64	12,600
Heat Treating Department	77	15,360
Total	1,230	211,160
Other Departments	639	80,120
Total	1,869	291,280
Oklahoma City Plant	54	10,000
Los Angeles Plant	107	20,000
Grand Total	2,030	321,280

HUGHES TOOL COMPANY

Main Office and Plant: HOUSTON, TEXAS

Branch Plants
LOS ANGELES--OKLAHOMA CITY

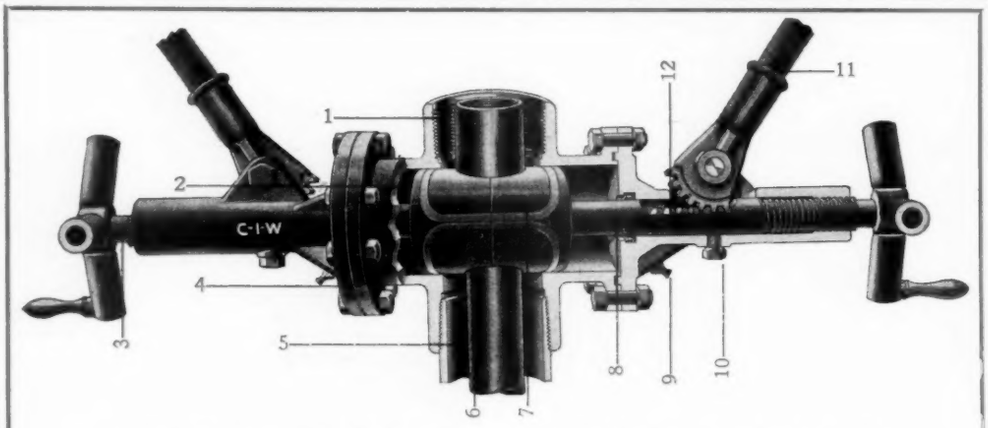
Export Office
NEW YORK CITY, N. Y.



Study the Features of This New C. I. W.

Combination Tubing Control Head and Tubing Blowout Preventer

Then You will say Yourself, that it is the most FLEXIBLE and ADAPTABLE Model on the Market.



1.—Threaded top to receive nipple, spider or stuffing box assembly.

2.—Solid steel rams. Note how they grip and pack off tubing.

3.—Quick operating lock-screw. Bored for lever to increase pressure.

4.—Strong, dependable construction, with flanged box for easy access.

5.—Threaded to fit on top of the final string of casing.

6.—Note close packing of rams around tubing and inside control head.

7.—Patented packing of solid rubber, inlaid in grooves cut in ram.

8.—Note leather cup and packing. Extra precautionary features to stop leakage.

9—Petcock for speedy release of air during operation of levers and rams.

10.—Guide bolt to hold rams in perfect alignment at all times.

11.—Lever Jacks with extension handles, for quick, powerful opening and closing.

12.—The ram-rod of solid steel is cast integral with the ram for greater strength.

Use This Equipment in Your Hook-up

—for Flowing Wells—for Gas or Air Lifts
—and later on Pumping Wells

THIS ONE TOOL eliminates the waste heretofore encountered in changing the oil recovery methods on wells. ON FLOWING WELLS, it packs tubing against casing to withstand pressures up to 750 lbs. IN GAS OR AIR LIFT hook-ups, it permits use of any one of four primary pressure methods. AND ON PUMPING WELLS the tubing coupling rests on the rams, with stuffing box assembly quickly attached above. This tool completely eliminates the use of spider and slips.

WRITE FOR BOOKLET GIVING DETAILED DESCRIPTION

CAMERON IRON WORKS

Manufacturers of
Oil Well Supplies and Fishing Tools

Houston, Texas

OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 33 01 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; copy. Entered as second-class mail matter December 23, 1 916, at the post office at Houston, Texas, under act of March 3, 1879.

POPULARITY

Gaso No. 1012

Two of the Most Popular of All Oil-Industry Pumps.

* * *

Dependability and serviceability are the twin reasons for the wide use GASO Nos. 1018 and 1012 enjoy.

No. 1012 is a discharge pump of sturdy construction with a capacity of 130 to 204 gallons a minute against 700 to 900 pounds pressure. It is widely used in mining and oil line work where long uninterrupted service is a necessity.

No. 1018 is a horizontal duplex gear-driven pump for suction service. Available in three sizes, 6, 8 or 10x18.

Full details gladly mailed on request.

* * *

GASO PUMP & BURNER MFG. CO.
Tulsa · Oklahoma

Gaso No. 1018

Our 64-page catalog is yours for the asking.

Money will buy many things but rarely popularity. The public simply won't applaud unless it feels applause is merited.

The same may be said of industrial products. Salesmanship may win the first order but the second depends on performance. The fact that GASO Pumps have achieved leadership in the oil industry largely by reason of *repeat orders* is convincing proof of their quality.

GASO PUMPS
for every oil industry need

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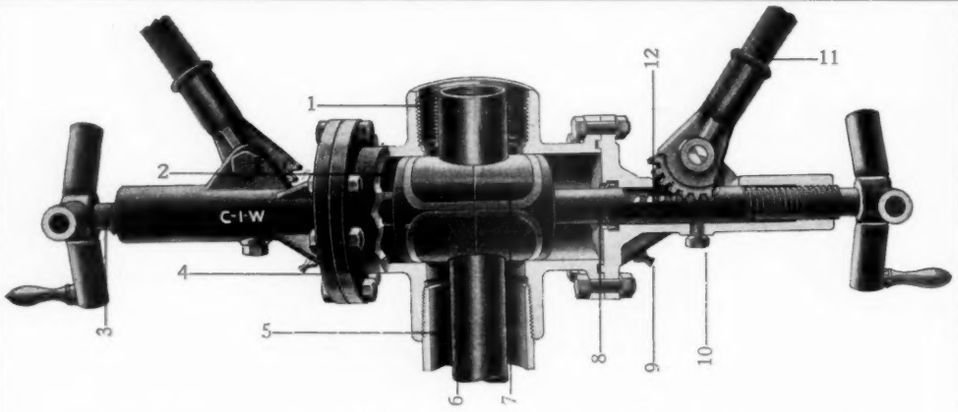

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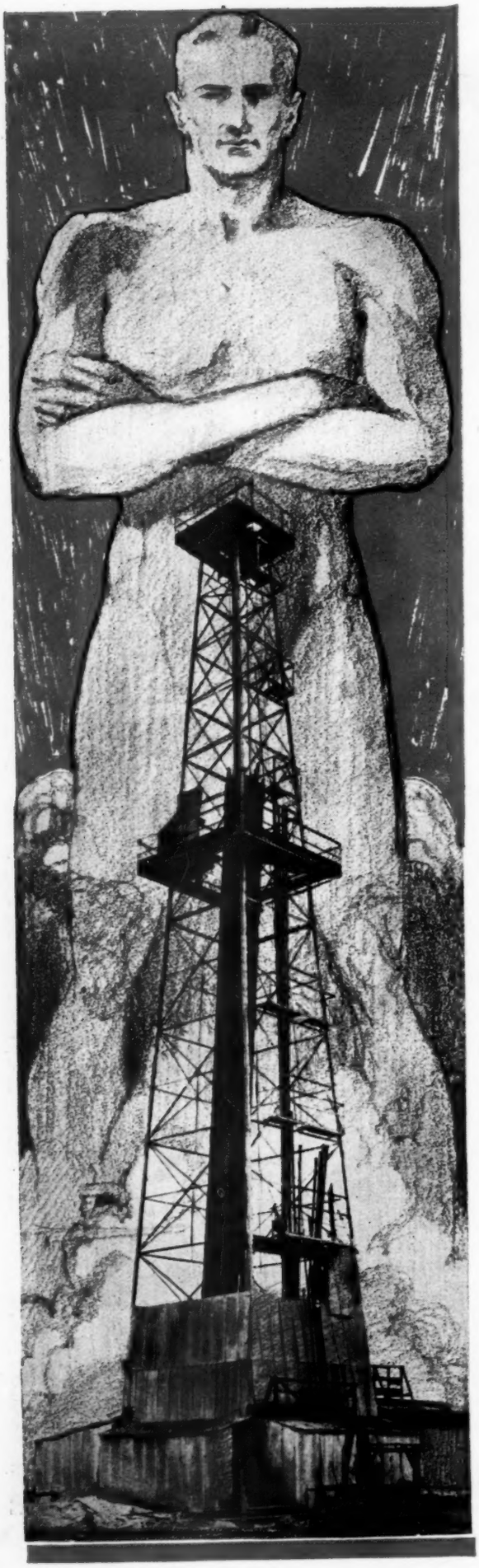

There's a GIANT'S strength in every IDECO STEEL DERRICK

IDECO

Say you saw it in The OIL WEEKLY

STRENGTH is a known factor in IDECO Steel Derricks and *strength* combined with correct design means satisfactory performance. IDECO Derricks are built of Beams, Bars, Angles—the same kind of steel construction that goes into our modern skyscrapers and into the bridges which span our great rivers.

Behind this steel fabrication is an Engineering Service specializing in Oil Country practice. And down to the smallest detail of design and fabrication, including galvanizing—IDECO Derricks, wheels, crown blocks and other rig equipment are built in our own shops. Into our products so completely under their supervision these engineers have planted a strength far in excess of the requirements of ordinary operation. This Giant's strength is for the unforeseen emergencies.

The experience of the many producers using IDECO equipment is convincing—such experience has sustained an IDECO reputation for delivering continuous maximum production wherever oil is found.

THE INTERNATIONAL DERRICK & EQUIPMENT CO.

The largest company devoted exclusively to the manufacture of steel (galvanized) equipment for the oil, gas and artesian industries

COLUMBUS, OHIO TORRANCE, CAL.

California Representative, National Supply Co. *of* California

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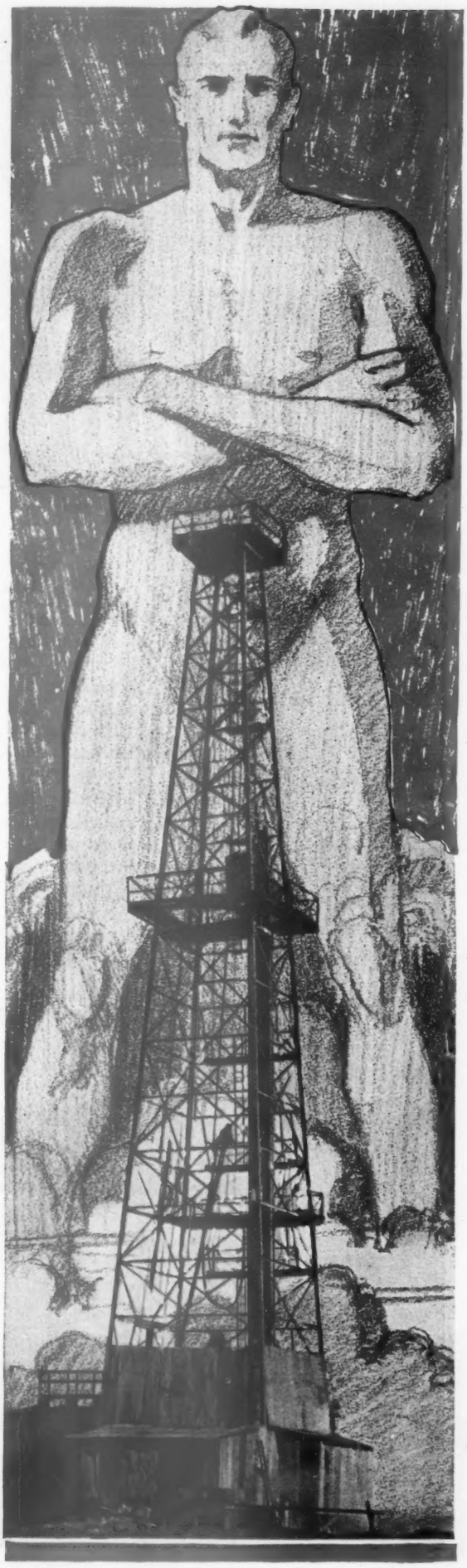
Amarillo	Smackover	Seminole	Taft
Borger			

Export Representation: 74 Trinity Place, New York City, Columbus, Ohio; Los Angeles and San Francisco, Cal.

INTERNATIONAL STEEL IDECO DERRICKS (GALVANIZED)



The
SMITH
EXPANSION ROTARY
UNDERREAMER
Never Gets Stuck in the Hole
The Smith Underreamer is equipped with a hydraulic control which releases the trip when the pump is started, insuring complete expansion of the roller cutters at any desired position in the hole. It also enables the driller to know definitely when the underreamer is expanded.
When the weight of the string is released by lifting the drill pipe, the expanded cutters positively close by means of dovetail connections with the block in which they set, and the body.
This positive closing feature, together with the roller cutters, eliminates any possibility of sticking, or dragging in the casing when coming out.
The Smith Underreamer operates easier and smoother, due to three-point roller contact with formation. Descriptive circular and prices sent on request.
H. C. SMITH MFG. CO., Inc.
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Branch Offices and Warehouses:
Taft, Calif. Bakersfield, Calif. Ventura, Calif.
Harry B. Shine, Sales Agent: 2408 McKinney Ave., Houston, Texas
ALL SUPPLY HOUSES
HSF

A Letter from Harry G. Nye

Nye Drop Forged Pipe Cutter

No. 1-A ⅛ to 1¼"..... $2.25 net
No. 2-A ¼ to 2"..... 3.00 net
No. 3-A 1 to 3"..... 5.00 net

Nye Chasers
Fit Nos. 1, 1A and 2 Receding Die Stocks

Each set is guaranteed in every particular. Will cut much easier than other similar dies.

No. 1, 1" to 1¼" .. $ .75 per set net
No. 1, 2" ..... $1.25 per set net
No. 2, 2½" to 4" .. 3.60 per set net

Nye thin blade cutter wheel, made to fit all standard makes of pipe cutters, and guaranteed against breakage in use. Made both in smooth and knurled edge.

NYE NO. 2
Geared Threading Device Improved

Capacity 2½ to 4 in. inclusive
Net price complete $50.00
West of Rocky Mountains .. 55.00
FREE TRIAL—ABSOLUTELY GUARANTEED

The No. 1A is the same as the No. 1 except that it is equipped with a ratchet for work where space is restricted.

No. 1A Nye Receding Pipe Threader, complete ... $12.00 net
West of Rocky Mountains $13.50

To the Oil Men of the U. S. A.

Fellow Citizens:

I see where some fellow wants to erect a monument to Jesse James, and it looks to me, at first sight, like a grand idea. There have been instances where we erected monuments to other bandits, and the fact that we didn't call them bandits but called them statesmen doesn't materially alter the matter. So I don't see any reason why Jesse shouldn't have a monument if he wants one.

As far as I am concerned personally, which isn't very far, the more granite they put on top of a fellow like Jesse James the safer I will feel. If there is anything in the world that a man gets that he deserves it is a monument—to hold him up to posterity if he is a good man, and to hold him down for posterity if he isn't. It seems to me that it serves a good purpose, whichever way you look at it.

But, if they are planning a Jesse James Week to raise money for a monument, I see one great objection to it. It will make the kids think Jesse James was a hero, which I guess is what I thought when I was a kid. I supposed we had gotten away from all that. Our kids do not read dime novels any more. Now they read WORSE. I'll say this for the dime novel: it was good, clean murder; IT WASN'T MUD.

But I have a good deal of sympathy for a bandit—not because I think he is such a hero but because I know he is such a SUCKER. I never knew many bandits personally (that is fellows who were known as bandits), but I never heard of one who wasn't an easy mark. Leaving the right and wrong out of it, and even the risk, what do these burglarious boobs generally do with their money—or other people's rather?

They go out with a gun and take the cash away from some quiet little fellow whose wife has just sent him after the groceries, and then they turn around and hand it to some other guy who is armed with nothing but a racetrack ticket or a stock certificate. They think they are smart because they can get money with a gun, and then let some slicker take it away from them with nothing but a piece of paper.

And what this whole letter is leading up to is this: if the bandits and burglars are boobs for letting someone who doesn't even tote a gun swipe from them what they have swiped from somebody else, what about the man who got his money honestly, who lets one of these high-pressure salesmen take it away from him for something he never heard of before, and that he will never hear of again?

I am no financier, and that is the reason why, when I am asked to buy something, I go around to the bank and ask them what I could get on it if I did. They generally tell me that all I could get would be a warrant for somebody's arrest, and maybe not that. Cheap stocks are like cheap dies—a darned poor investment. But buying Nye tools is like buying U. S. Steel preferred.

Play safe—buy Nye tools,

HARRY G. NYE.

Otherwise Known As

THE NYE TOOL & MACHINE WORKS
4120-30 Fullerton Avenue
Chicago, Ill.

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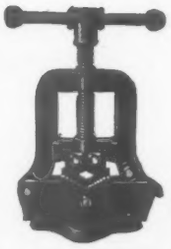

Nye Self-Locking Vice

No.	Pipe	Vise, Complete Net
00	⅛ to 2 "	$2.82
10	⅛ to 2½"	3.34
20	¼ to 3½"	5.00
30	¼ to 4½"	7.33

Nye Saunders Pipe Cutter

No. 1	$ 1.80 net
No. 2	2.70 net
No. 3	6.60 net
No. 4	10.80 net
No. 5	16.80 net

The rugged construction and few working parts account for the simplicity and durability of these Nye Receding models. They do the work easily and efficiently.

No. 1 Nye Receding Pipe Threader, complete .... $9.60 net
West of Rocky Mountains $10.80

Traveling Blocks
that are not equipped with
Roller Bearings
are likely to stop traveling prematurely

Old Age doesn't creep—it jumps, quite often, on the traveling block that depends upon plain bearings.

Anyone of the chief manufacturers of the illustrated crown blocks will tell you why.

Also they will tell you why they are now building their blocks on principles arising from a strong faith they have in the super ability of "the standardized Oil Field Bearing."

Get them in the first place; Use them to replace plain bearings

Also Standard Equipment for the Better
Hoists
Winches
Reverse Clutches
Drilling Machines
and other drilling equipment

Standardized by
American Well & Prospecting Co.
Boykin Machinery & Supply Co.
Hopper Machine Company
Latex Iron & Steel Works, Inc.
Lee C. Moore & Co.
Lucey Manufacturing Co.
Oil Well Supply Co.
Portable Rotary Rig Co.
Star Drilling Machine Co.

LARGEST MANUFACTURERS OF ROLLER BEARINGS FOR INDUSTRIAL PURPOSES

AMERICAN ROLLER BEARING CO.
PITTSBURGH, PENNA.

SPECIALISTS IN PRODUCTION OF ROLLER BEARINGS FOR THE OIL INDUSTRY

AMERICAN
HEAVY DUTY TYPE "C"
ROLLER BEARINGS

It's a Wilson

Give your kelly the right bushing

WILSON *Rotary Drive* Bushing.

[MANGANESE STEEL]

Wilson Oil Tools Corp.
DISTRIBUTORS FOR
Wilson & Willard Mfg Co.

Factory and Main Office: 5101 Wilson, 5101 East Vernon Ave, Los Angeles, Calif.

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Tulsa, Okla. 409 Atlas Life Bldg.
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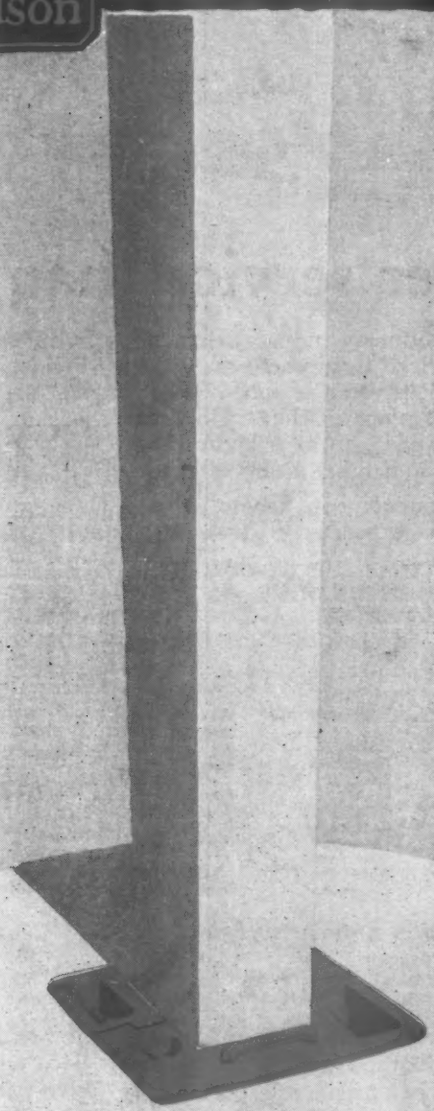

Made of manganese steel, providing a very hard metal with a tough grain composition that will not damage the Kelly and will retain its original shape during sustained drilling operations.

Light in weight, designed with strong reinforcement ribs that add greatly to the strength of the Bushing.

Top of Bushing is smooth, flush with rotary table. Can be operated bolted or unbolted.

Carried in stock by your Supply Companies

Now

or

better service than ever before

The oil producing industry demands quick service. Equipment and crews must be kept on the job. Perhaps there is no place in the world where work is carried on at a higher pressure than in drilling a new oil well.

This announcement has an important message to every purchaser of supplies in the Mid-Continent Oil Fields. It means for him better service than ever.

Crescent Brand Wire lines and Tru-Lay Brand Preformed Wire lines in the Mid-Continent Oil Fields are now available through the following supply companies:

ATLAS SUPPLY COMPANY, Muskogee, Okla.; Fort Worth, Texas
MARION MACHINE, FOUNDRY & SUPPLY COMPANY, Tulsa, Okla.
THE FARLEY MACHINE WORKS COMPANY, Arkansas City, Kansas
MID-CONTINENT SUPPLY COMPANY, Houston, Texas

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El Dorado
Sedan
Winfield
Oxford
Hutchinson
Gorham
Arkansas City
Lost Springs

OKLAHOMA
Tulsa
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Shidler
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Earlsboro
Wewoka
Okemah
Wetumka
Muskogee
Tonkawa
Duncan
Wilson
Bristow
Ponca City

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TEXAS
Panhandle
Berger
Pampa
Roxana
Shamrock
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Eastland
Coleman
Breckenridge
Graham
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Fort Stockton
San Angelo

Gulf Coast
Houston

ARKANSAS
Smackover
Norphlate

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Research Department

M. R. HENDERSON
Tulsa, Okla.

"The Application of Wire Rope to Oil Field Equipment" is an instructive handbook prepared especially for oil field wire rope users. Your name and address will bring a copy of this book and specific information on your own particular problems.

AMERICAN CABLE COMPANY, Inc.
105 Hudson Street, New York City
An Associate Company of the American Chain Company, *Incorporated*, Bridgeport, Connecticut
District Sales Offices:
Chicago Cleveland Philadelphia Pittsburgh San Francisco Tulsa

ACCO
AN ASSOCIATE COMPANY OF AMERICAN CHAIN COMPANY, Inc.
in business for Your Safety

PREFORMED WIRE ROPE

TRADE **TRU-LAY** MARK

[REG. U. S. PAT. OFF]

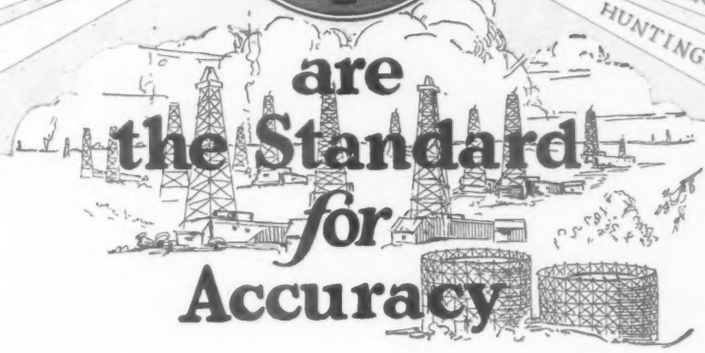
This Announcement is important—be sure your engineer and buyer see it—

In Every Field of Measuring

TONKAWA
BURBANK
CUSHING
BRISTOW
SEMINOLE
N. CENTRAL & W. TEXAS
EASTERN

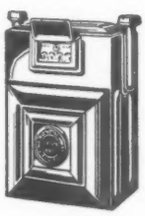
METRIC METERS

TEXAS PANHANDLE
E. CENTRAL TEXAS
GULF COAST
S. WEST TEXAS
SANTA FE SPRINGS
LONG BEACH
HUNTINGTON BEACH



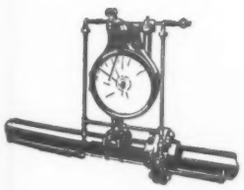
are the Standard for Accuracy

Orifice Meters: Introduced by Metric in 1915 and modernized time after time until today the most popular "general utility" meter for four measuring services—gas, oil, steam and water. "The *Standard for Accuracy.*"

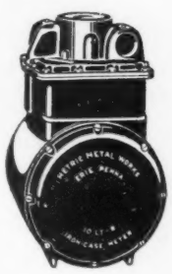


Ironcase Meters: Pioneered by Metric and fashioned in various styles for specific services including: Drilling Well meters, Curb meters, Large Capacity—High Pressure meters, Positive Meters, Observation Meters, Prepay meters, etc. Only Metric makes Ironcase meters. Each in its class is the *Standard for Accuracy.*

Tin Meters: More than a million in service which were made by Metric craftsmen. These meters are of standard sizes, conservative capacities and have an established renown for *accuracy.*



Metrics: (Large Volume, [Positive] meters) manufactured by Metric Metal Works in 1926 and already in wide use because they answer today's greater demands in a new and better way.

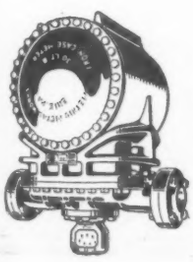


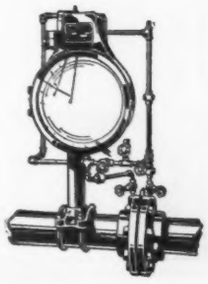
Look around you wherever it may be from production work to consumer service—these Metric Meters constitute the sturdy STANDARDS OF ACCURACY *in every phase of the many great oil and gas measuring responsibilities.*

WESTCOTT & GREIS, Inc.

Sales Service

Dallas **TULSA** **Los Angeles**





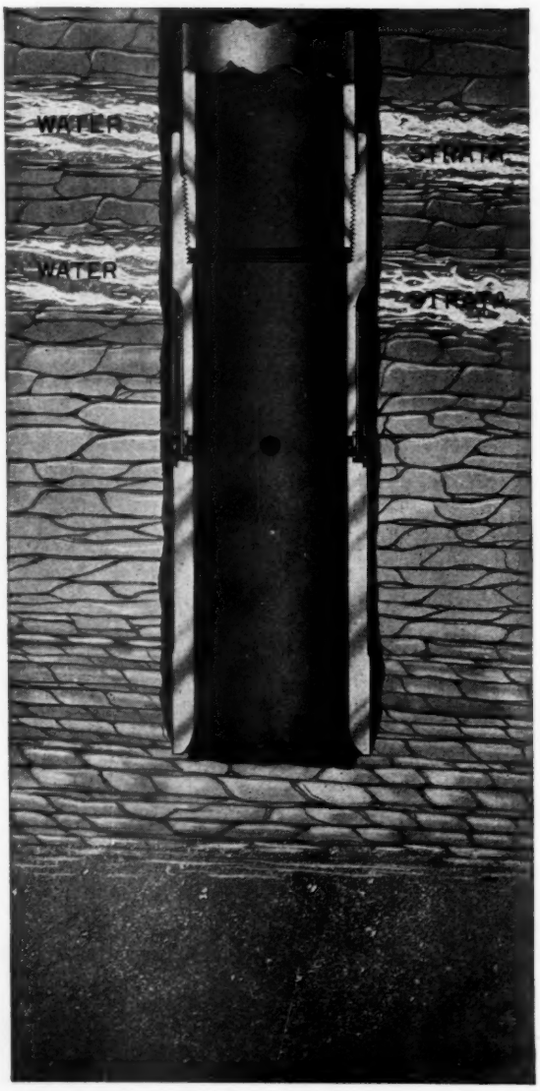
METRIC METAL WORKS

of the American Meter Company-Inc.

- ERIE - PENNSYLVANIA - U - S - A -

Say you saw it in The OIL WEEKLY

Automatic Cementing
Precise Control
Even Distribution!!!



THESE VITAL FACTORS ARE ASSURED BY USING—

The CROWELL

Makesure
CEMENT BARREL
OR SHOE
Lorraine Built

Automatically places and properly and evenly distributes the cement at any point desired.

Forces the cement out and around the casing through spring-controlled ports. A perfect circulation is thus assured at all times.

May also be used to set casings on the bottom of the hole, or to cement combination oil and water strings under any conditions encountered in oil country work.

Write us today to mail you complete data and performance records in all territories. No obligation involved.

THE LORRAINE CORP.
MANUFACTURERS AND DISTRIBUTORS
OIL WELL SPECIALTIES
115th and Alameda Streets
Los Angeles, Calif.

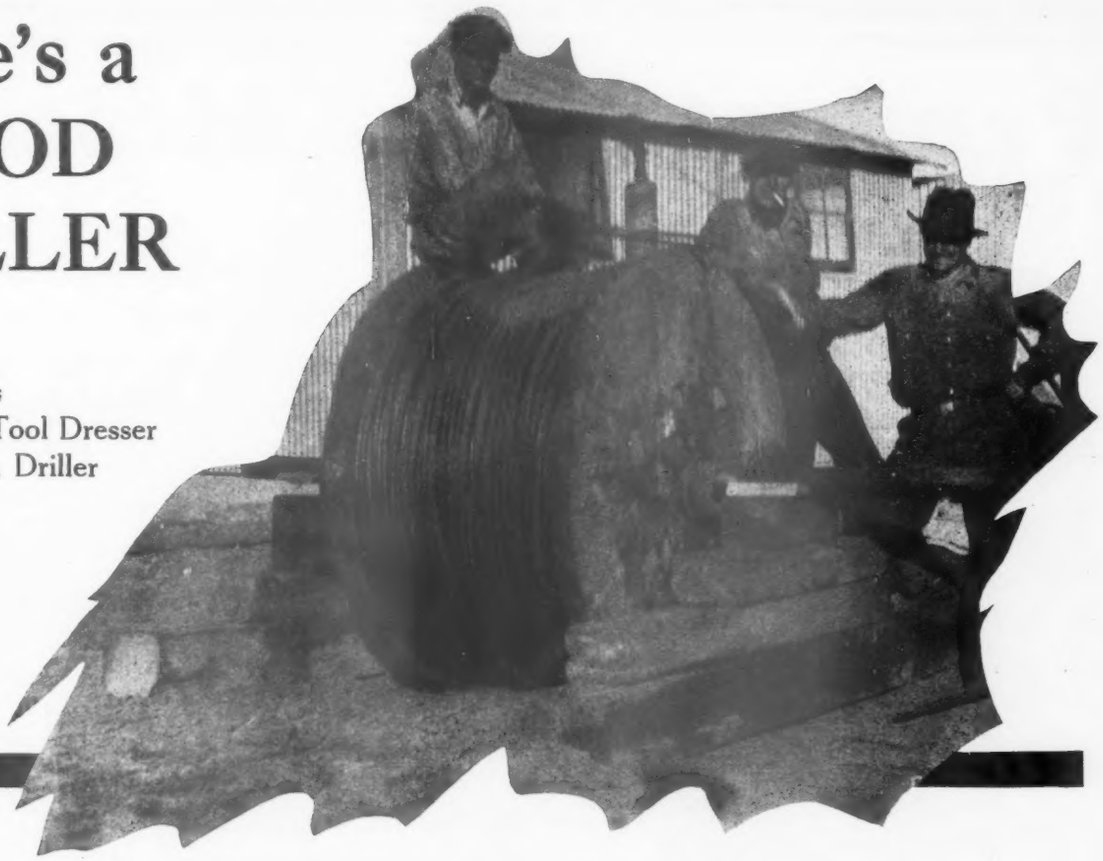
Oklahoma Branch:
The Lorraine Corporation,
Percy D. Hammer, Agent
406 West First Street,
Tulsa, Okla.

Arkansas Branch:
Southern Specialty Co.,
523 S. Washington St.,
Box 1796,
El Dorado, Arkansas

Kern County Representatives:
New Method Pipe Slotting Company
Phone 465 Taft

Here's a GOOD DRILLER

Left to right
O. H. Downs
O. C. Byrd, Tool Dresser
W. C. Loper, Driller



A Good Driller with a Good Wire Line will make any boss happy over their results.

Mr. Loper, whose picture you see here, says "I get wonderful service out of

WILLIAMSPORT WIRE Telfax Tape Marked Factory Certified LINES"

You cannot expect Mr. Loper to say anything else. He knows HOW to use a good line and get the money's worth from it.

Here's a Happy New Year to you from us, Mr. Loper, and to all the rest of the good drillers like you,—and to all other users of Williamsport lines.

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WILLIAMSPORT

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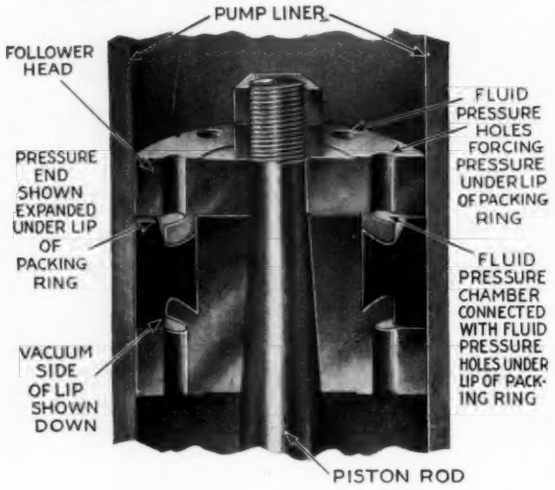
Products That Mean a Sa

THE KIBELE PATENTED PRESSURE SELF EXPANDING FRICTIONLESS AND NON-SLIPAGE PISTON


PUMP LINER
FOLLOWER HEAD
FLUID PRESSURE HOLES FORCING PRESSURE UNDER LIP OF PACKING RING
PRESSURE END SHOWN EXPANDED UNDER LIP OF PACKING RING
FLUID PRESSURE CHAMBER CONNECTED WITH FLUID PRESSURE HOLES UNDER LIP OF PACKING RING
VACUUM SIDE OF LIP SHOWN DOWN
PISTON ROD

The KIBELE PISTON is made for rotary drilling slush pumps, mine pumps, boiler feed, and oil pumps.

It is guaranteed to outlast the average piston four or five times. No special piston rod is required. Made to fit any make pump.

THE SECO HOSE CLAMP AND NOZZLE is all steel, and much longer than the average. It prevents hose from short kinks and will add 50% to the life of the hose.

Guaranteed to give complete satisfaction at all times.

The products shown on these pages have been tested and proven, by some of the largest users of oil field equipment, to be superior to any similar products on the market today.

SECO HOSE CLAMP AND NOZZLE (ALL STEEL)

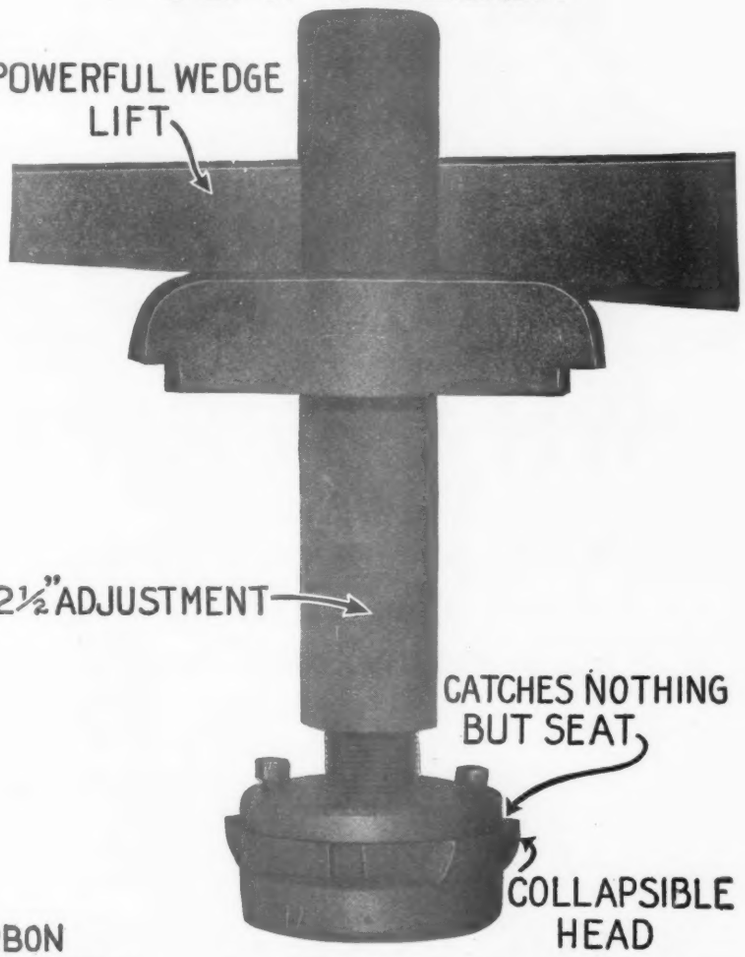
MISSION SAL

Esperson Building,

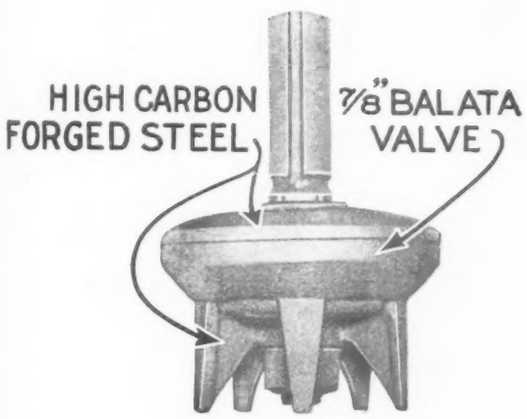
ving to the Oil Industry

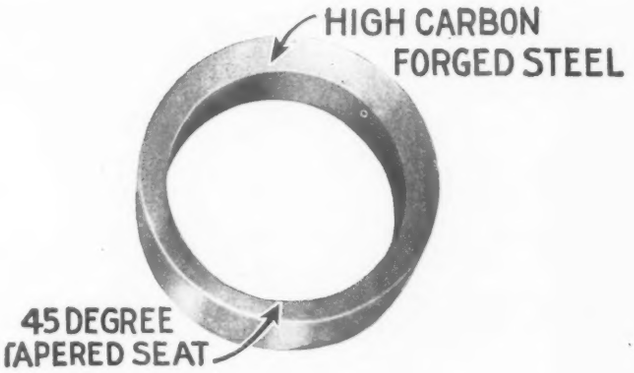
Complete information on these products, including price lists, will be gladly furnished by your supply store or by writing direct to MISSION SALES COMPANY.

SECO VALVE SEAT PULLER



SECO VALVE





THE SECO VALVE SEAT PULLER is a positive seat puller that will not break while pulling valve seats no matter how tight they are stuck. This seat puller has been approved by many of the best engineers in the pump manufacturing business.

THE SECO LINER PULLER works on the same principle as the valve seat puller.

THE SECO VALVE has all-steel forged valve and seat, with tapered balata insert.

The Seco Valve will give better service, at the same cost, than the old style valve.

Made at present for Type C Gumbo Busters. For all pumps in the near future.

Drop forged is the last word in pump equipment.

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Houston, Texas

"Worth Its Weight in Gold"

WHAT PRICE VALVES

YOU get all that you pay for. This statement would be true even in the day of no competition—but is more particularly true in this day of *keen competition.*

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THE LUDLOW VALVE MFG. CO.

Troy, New York

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LUDLOW VALVES

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The gears in the Hild Drive are treated by the famous BP "tough-hard" process—the most successful ever developed for the treatment of gear steel. Hild Drives that have drilled as high as fourteen wells, show practically no wear on the gears—convincing proof of the gear quality.

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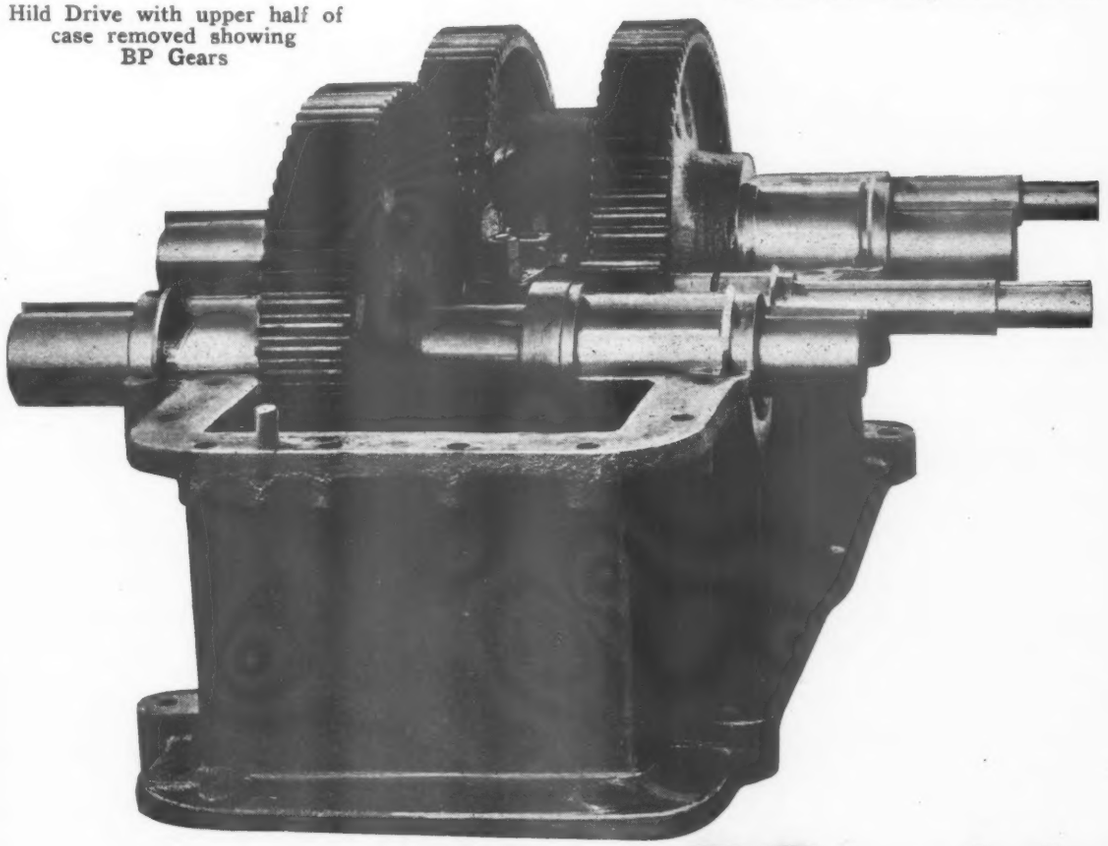
Oil Well Supply Co., Authorized Distributor of Nuttall Pump Gear Units

Hild Drive with upper half of case removed showing BP Gears



Nuttall

Production, *Plus*

The new mill grooved pipe. Note greatly increased inlet surface.

Increased Inlet without weakening the screen.

Fully Protected by Patents

That's the success already being acclaimed this latest Oil Well Screen development. *Increased Production* is but one of the many advantages of—

THE LAYNE

Mill Grooved Keystone Wire Wrapped Screen—

This screen has all the well known advantages of the regular Layne Keystone Wire Wrapped Screen, plus the milled groove opening which almost doubles the fluid inlet area.

A quarter of a century

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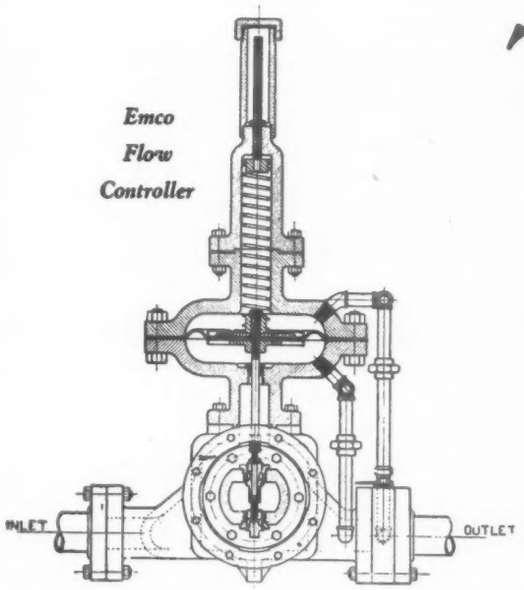
Air Lift Operation

REQUIRES ACCURATE VOLUME CONTROL

Perfect Volume Control Is An Essential Feature In the Oil Industries Latest Development



THE Emco Flow Controller is a rugged, fool-proof, sturdy, and simple mechanism giving accurate volume control, yet designed to withstand the rigors of oil field operation.

Volume control is obtained by an accurate differential diaphragm head, operating balanced valves so as to maintain a constant differential pressure across an orifice.

The same design features and construction which have earned for EMCO Pressure Regulators their enviable position as leaders, are used throughout the EMCO Flow Controller.

Simple adjustments can be made for varying the flow of air or gas into the well; a variable orifice (butterfly valve type) and a wide range differential diaphragm spring are provided so that any operating condition can be met.

An EMCO Flow Controller at the intake of the well will insure the accurate volume control so necessary for efficient operation of the air or gas lift.

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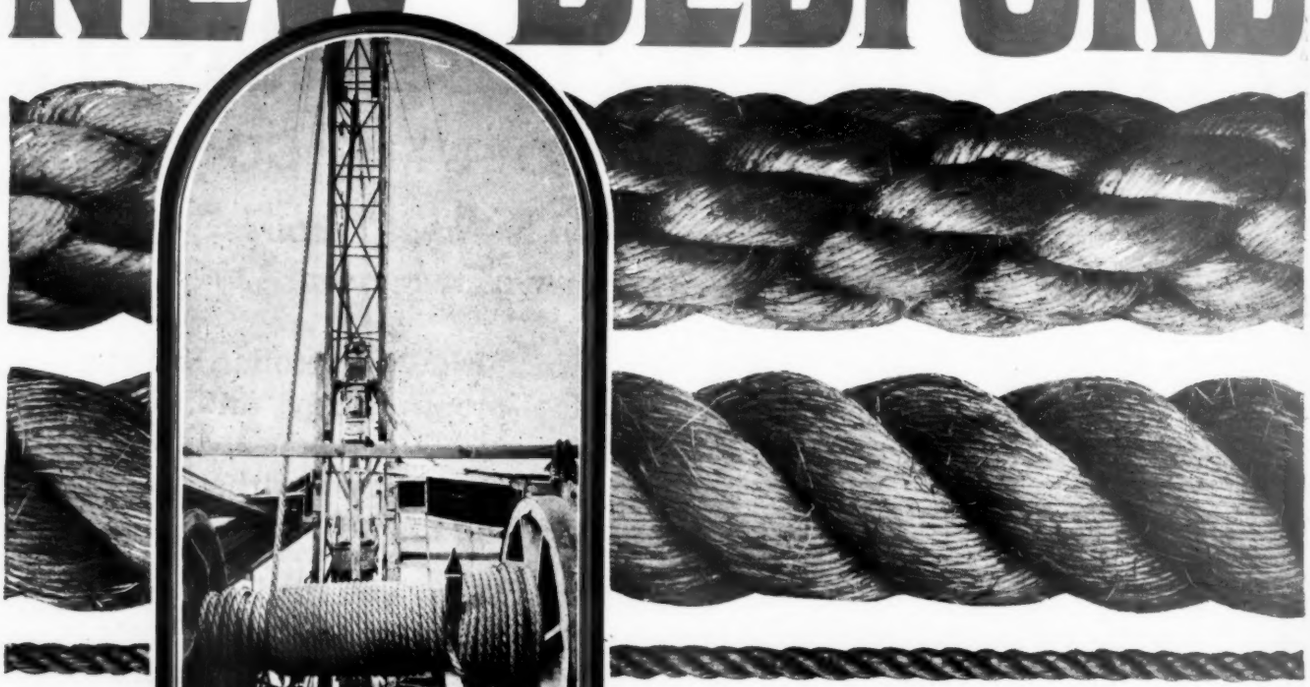
NEW BEDFORD



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BULL ROPES
TORPEDO LINES

when JOHN TYLER was PRESIDENT

New Bedford Cordage had *already* earned a wide reputation for strength and durability.

Many years later, when men began to drill for petroleum, New Bedford furnished manila drilling cables of the highest quality. Now, as regards Drilling Cables, Bull Ropes and Torpedo Lines, "New Bedford—None Better" is a slogan founded on fact.

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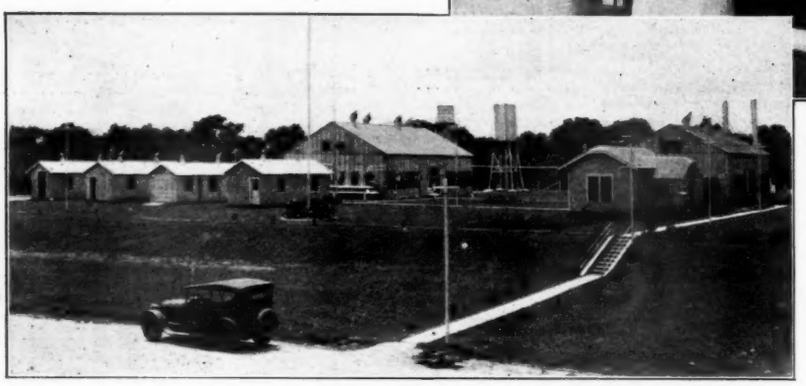

Owosso Plant Oklahoma Natural Gas Company

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Gives More Light

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Say you saw it in The OIL WEEKLY

Volume 48, No. 4 January 13, 1928

The OIL WEEKLY

Edited Weekly at Houston, Texas

SPENCER W. ROBINSON, Editor

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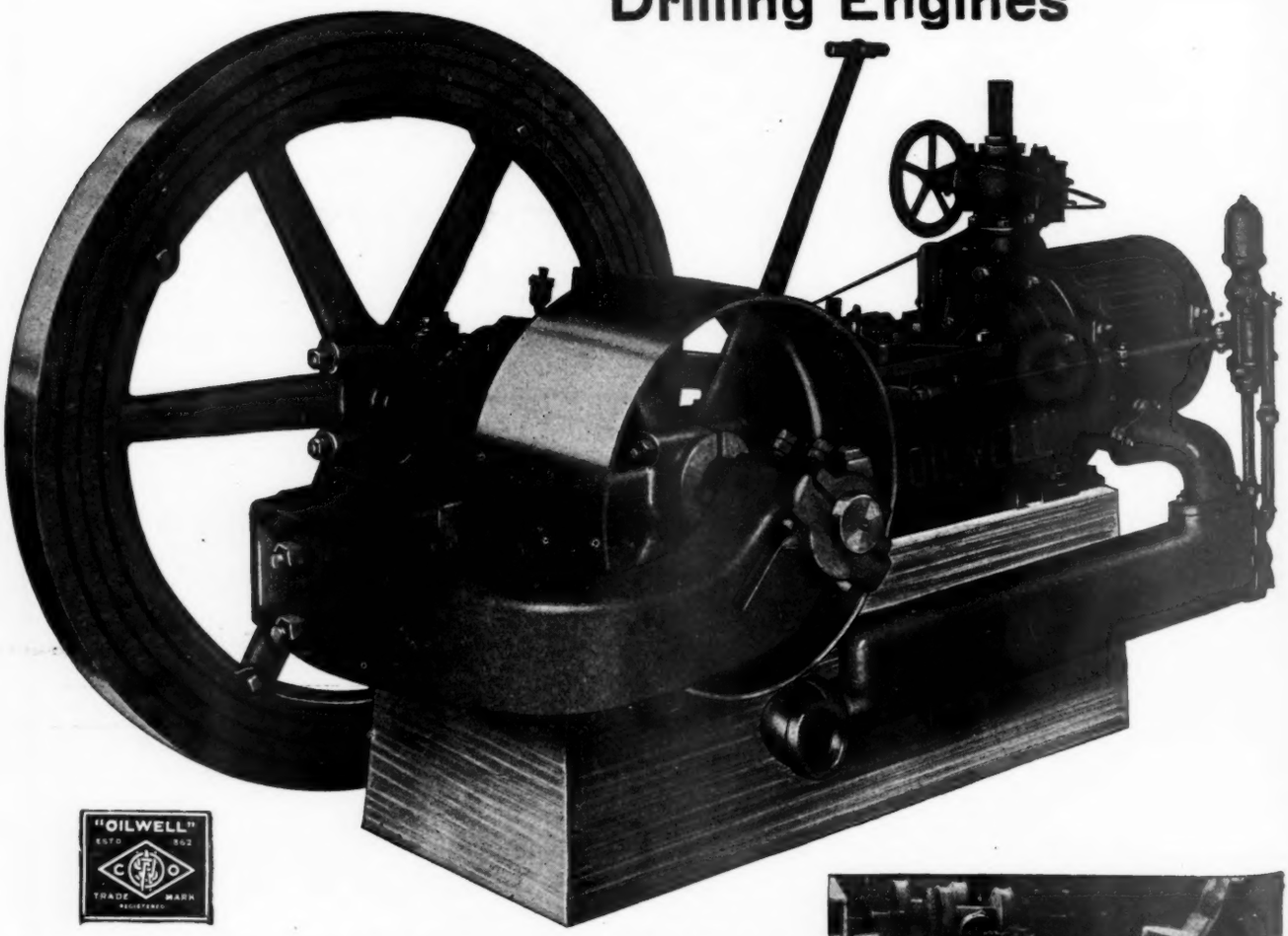
You Can Expect the Best from "OILWELL" Drilling Engines



"OILWELL" Engines have drilled wells in every oil field in the world, and have a reputation for strength, power, durability and ease of operation.

They are constructed with the greatest care, undergoing frequent inspections during their manufacture, including a running test, and only men of long experience in building these engines are employed.

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This outboard bearing is carried by an arm rigidly attached to the bed, and the arm is of such design and strength as to always hold the outboard bearing in line with the two main bearings, thereby distributing an equal pressure to each of the three bearings. With the **"OILWELL"** Outboard Bearing a belt, already clamped together, can be put on the engine pulley without removing any part of the bearing.

Force feed oil pumps are standard equipment on all **"OILWELL"** Engines

For further information inquire at any of our 100 Branches

Part of a shipment of 36 "OILWELL" Engines to a large foreign oil company

OIL WELL SUPPLY CO.

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WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

Say you saw it in The OIL WEEKLY

Daily Production Average Drops 40,700 Barrels

By KENT RIDLEY

TO the Rocky Mountain region goes the distinction of being the one group of fields in the United States to show an increase in production in a week which saw a drop of 40,000 barrels in daily average to 2,379,050 barrels. This is the estimate compiled by the American Petroleum Institute for the first week of the new year, which was a period of unusual weather in most producing regions, a circumstance which probably accounts for much of the large drop.

Later reports of production at Seminole are that production of the five fields in the group has rebounded since the cold weather passed. Oklahoma shows a decline of 26,350 barrels daily average for the week covered by the current report, while the five Seminole pools lost 23,500 barrels. However, on Monday of this week the production there had again gone up around 350,000 barrels daily. Changes in other Oklahoma fields were negligible as regards the individual field, except at Burbank, where a loss of 1500 barrels was registered. This was the reverse of Burbank's performance the week previous.

Texas, outside of the Gulf Coast, was down only 7200 barrels, significant only in that it is a continuation of the gradual downward trend which has continued for several weeks. The Gulf Coast was down 2750 barrels, a loss of 1350 barrels at Spindle Top being a principal contributor.

North Louisiana was down an even 2,000 barrels, the decline of individual fields being general.

Arkansas continued its downward trend by dropping 3200 barrels, a loss greater than the average decline set for that section by performance during recent weeks.

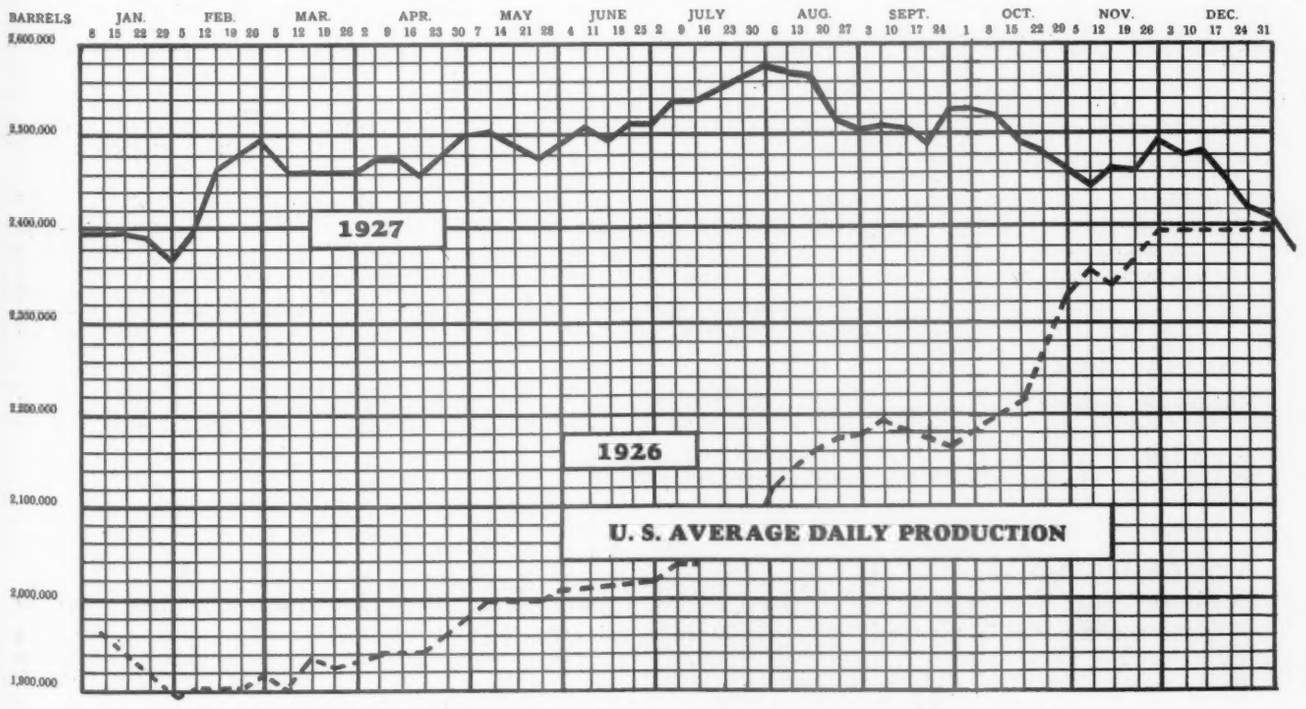
California was down 600 barrels, the majority of the principal fields in that State remaining unchanged from the previous report. Ventura Avenue was down an even thousand barrels per day, and gains in the smaller fields reduced the loss to the figure indicated.

Eastern States declined 500 barrels.

The gain in the Rocky Mountain States was occasioned by increases in Wyoming and Colorado. In the former State Salt Creek increased from 38,950 to 42,450 barrels daily, while the gain of the several fields, together with loss offsets was 3,000 barrels. In Colorado the fields listed as "others" were responsible for a gain of 2,250 barrels for the State. Montana and New Mexico both lost, the former only 500 barrels and the latter more substantially.

The total of 2,379,050 barrels is the lowest average recorded since January of last year.

UNITED STATES CRUDE PRODUCTION TREND



Details of United States Production Estimates on Page 52

New Producers Add 83,200 Barrels Initial Production

Seven wells in Pecos County, Texas, have combined initial output of 45,000 barrels; permits issued show loss

By JACK LOGAN
Staff Representative

ALTHOUGH the initial production of all wells completed in the United States during the past week amounted to 83,201 barrels, a relatively high figure, a decrease was shown as compared with the amount of new oil of the week before; and this in spite of the fact that more producers were completed. The 83,201 barrels of oil for the past week came from 139 new wells, while the 90,238 barrels of the previous week was from 120 producers.

The high average initial per well for the past week, as for the previous week, was due largely to big wells in the Yates field, Pecos County, Texas. In that field seven new wells were completed for a combined initial yield of more than 45,000 barrels, which represents more than 75 per cent of the new oil of the State for the week, and over 50 per cent of that of the nation.

The largest of the seven Yates field wells was Roxana Petroleum Corporation's Tippett 5, initial production 17,700 barrels, and the next largest was Mid-Kansas and Transcontinental's Yates 4-C, which came in for 13,200 barrels. The initials of the other five varied from 850 to 6550 barrels.

On Tuesday of this week 44 wells were drilling in the Yates field, and rigs were up for 26 tests; while at the same time last week 50 wells were drilling and 18 rigs were up.

The total initial production of all wells completed in West Texas for the week was 51,575 barrels. All other sections of the State outside of this area supplied only 3712 barrels of new oil.

Summarizing the activity in Texas: There were 98 completions, including seven gas wells, 41 failures, and 50 producers which had a combined initial yield of approximately 57,000 barrels. The 36 new producers of the week before had a combined initial of over 71,000 barrels.

California Has Large Wells

While the average initial yield of wells in Texas was over 1000 barrels, the average of wells completed in California during the week was nearly as high, 12 producers in that State having been brought in for a combined initial of 12,040 barrels. During the previous week eight wells were completed in California, but they furnished less than 2000 barrels of new oil.

The 12 wells of the past week included two 3100-barrel producers at Long Beach, a 1300-barrel well at Seal Beach, and one at Ventura which came in for 1000 barrels.

The record of Kansas, also, was somewhat out of the ordinary. In that State nine wells came in, furnishing about 5000 barrels of new oil; whereas during the previous week, 15 producers supplied only 4000 barrels. The well-average of the nine producers of the past week was relatively high as a result of two good wells at Oxford; Roxana's Emerich 7, initial 1810 barrels, and Wasson et al's Gassoway 1, a 2245-barrel producer.

Oklahoma, in contrast with California and Kansas, contributed less new oil than during the previous week, although the number of new wells completed was exactly the same, 28 in each instance. The total initial production for the past week was approximately 7500 barrels, while for the week before it amounted to more than 10,500 barrels. The largest well among those contributing to the 7500 barrels of new oil had an initial production of only 1420 barrels. Seminole County completions numbered 10, and included two failures and eight producers of a combined initial yield of 4085 barrels. On Tuesday of this week Greater Seminole had 123 wells drilling and 16 rigs up, while at the same time a week earlier there were 130 wells drilling and 10 rigs up.

During the week ending January 7 the total number of drilling permits issued by the principal oil producing States was 193, as against 240 for the previous week, decreases being shown by most States. Texas issued 97, as against 105 during the previous week; Oklahoma 43, as compared with 71; Kansas 18, a decrease of 10; California 24, decrease of one; Arkansas three, a decrease of one, and Louisiana eight, an increase of one.

DETAILS ON CRITICAL FIELDS

	Oil Wells Completed	Total Initial Production	Initial Per Well	Number Producing Wells	Daily Production Barrels	Daily Production Per Well	Rigs Up	Wells Drilling
TEXAS PANHANDLE—								
Hutchinson County	1,083	543,055	502	976	51,305	53	8	20
Gray County	182	70,435	387	179	16,655	93	13	43
Carson County	177	58,695	332	151	7,545	49	....	4
Wheeler County	41	14,170	346	34	1,165	34	5	8
Totals	1,483	686,355	463	1,340	76,670	57	26	75
WEST TEXAS—								
Church & Fields	176	200,200	1,137	171	77,570	454*	4	8
Gulf-McElroy	56	50,210	897	55	17,505	318	1	1
Hendrick	41	121,810	2,971	50	64,115	1,282*	10	83
Yates	115	715,300	6,220	108	50,340	466*	26	44
Totals	388	1,087,520	2,803	384	209,530	546	41	136
OKLAHOMA—								
Seminole	1,207	1,526,629	1,264	1,066	350,971	329	16	123

*Production partially pinched.

Completion Details, page 54; Permits for New Wells, page 62

Bargains Offered West Texas Crude Buyers

Contracts being signed below posted price; Seminole production comes back with moderate weather; California situation unchanged

FORT WORTH, Texas—Bargain crude prices that have not been approached in the Southwest since the major flood of low gravity oil in the Smackover field, are being obtained by a small group of independent refining concerns from the West Texas independent operators, who are pressed for a market outlet. The Hendrick field, Winkler County, has been the only important source of distressed price crude available on long time contracts, but several deals are now pending whereby a portion of the Yates field output now in control of small operators will be offered below the market price.

Two separate contracts involving deliveries of about one million barrels of Hendrick crude within the next 12 months have been made lately at flat prices that represent a cut below the current posted price of 60 cents per barrel at the well. The Texon Oil & Land Company has contracted to deliver 75,000 barrels of crude monthly from its leases in the Hendrick field to the Valley Refining Company, which was recently organized by Eugene Griswold and associates of Wichita Falls, at a flat price of 65 cents per barrel f. o. b. refinery. The Valley Refining Company is moving equipment from North Texas to operate a 2,500-barrel skimming plant on the T&P Railroad, Ward County, near Pyote, or about 18 miles south of the Hendrick field. The plant will be adjacent to the 40-car tank car rack being erected in the southeast quarter of section 100, block "F," GMMB&A survey, by Texon, with a six-inch pipe line extending from the field to this point.

In connection with this refinery project, Griswold and associates have arranged to put on a fleet of auto trucks to market gasoline and kerosene throughout this general section of the State, and a number of fuel oil contracts have been booked with industrials at El Paso. Griswold and associates have also contracted to deliver 60 cars of fuel monthly for one year to a Chicago marketer at 40 cents per barrel f. o. b. buyer's cars, such being a record low price for this commodity in the southwest, considering the high B. T. U. content of fuel oil made from West Texas crudes, which average 29-30 gravity.

The New Orleans Refining Company has booked 3,500,000 barrels of Hendrick field crude on contract, having purchased 2,500,000 barrels from Independent Oil & Gas Company last November at a reported price of 73 cents per barrel loaded on buyer's cars, thus allowing Independent 13 cents above the present market price to cover gathering transportation and loading expense in getting the oil to the car rack, located about 18 miles south of the field. Landreth Production Corporation is reported to have sold 1,000,000 barrels to New Orleans Refining Company at 60 cents per barrel f. o. b. buyer's cars, and will have an 18-mile, six-inch line built from the field to a rack early next month to start shipments. Landreth Production Corporation is asking royalty owners of crude involved to accept 50 cents per barrel for their share of the oil to be sold to the Louisiana plant.

American Petroleum Company, subsidiary of Republic Production Company, several months ago contracted to sell 50,000 barrels of Hendrick field crude monthly to the Rio Grande Oil Company, El Paso, at 75 cents per barrel f. o. b. buyer's cars. This contract is reported to extend over the present year, and was made before a big daily output was registered by the field. American has a six-inch line extending from the field to a tank car rack on T&P railroad, near Pyote.

The Blue Bonnet Oil & Refining Company, with headquarters at Santa Fe building, Dallas, has a one-year contract with Southern Crude Oil Purchasing Company, calling for the delivery of its 2,500-barrel daily requirements at the posted price, plus a transportation charge. The refinery is located at Wickett, which is the terminus of Southern's Hendrick field rack line, and the first operation of this plant was started late last week, although the T&P Railroad has not completed the spur track for tank car rack. The T&P Railroad has contracted to purchase 100,000 barrels of fuel oil as made from this plant.

Trading in the West Texas low gravity crude market continued active during the past week, and two deals were made public that involve the delivery of more than 3,000,000 barrels of oil before the close of the present year.

Magnolia Petroleum Company contracted to run 7500 barrels daily from the Church & Fields property of the Landreth Production Corporation over the balance of the year, paying posted prices for the oil. The Valley Refining Company, which is controlled by Eugene Griswold and associates of Wichita Falls, has contracted to take 75,000 barrels monthly over the balance of year from the Texon Oil & Land Company, and the latter is laying an eighteen-mile, six-inch line from the Hendrick field, Winkler County, to the T&P Railroad, near Pyote.

The Valley plant will be built adjacent to Texon's car rack, and the crude is to be delivered at 65 cents per barrel f. o. b. plant, thus allowing the producer five cents above the current posted price for gathering and transporting the crude to the plant.

Humble Oil & Refining Company has granted West Texas producers more time to sign up the three-year crude contract, which was announced in these columns last week, before carrying out the original order to sever pipe line connections and give same to producers who will agree to such terms. Other than the Simms-Atlantic deal, which was the first three-year contract to be obtained by Humble, none of the original group picked out by Humble have turned in signed contracts to Humble, according to a check made early this week.

Production in the Texas Panhandle district has declined below the current demands of trunk lines, local refineries and tank car shippers, thus creating a firm crude market with five and ten-cent premium being paid for oil in Hutchinson and Gray Counties by independent buyers.

The high gravity crude in the Pampa area, Gray County, is the most desired oil in the district, and all tank car shippers are paying a premium to obtain this oil, except Sinclair Crude Oil Purchasing Company. The Toronto Pipe Line Company is reported to have contracted to run 50,000 barrels of oil from Danciger Oil and Refining Company within the next month at a dime premium.

Heavy shipments of low priced West Texas crudes via tank cars to refineries in Louisiana, are cutting into the market outlet for Smackover heavy oils and premiums on spot sales of the latter product are being discontinued.

LOS ANGELES—The much looked-for flood of crude has failed to hit California, and a much better tone has been given the crude oil market. The wave of optimism may be short-lived,

however, all signs point to a larger production during the next two months. California is closely watching the Mid-Continent situation and derives almost as much satisfaction from a decline in that territory as within its own confines. A much better feeling prevails among operators, who believe that the coming year will be a profitable one. The industry cannot get away from the shadows of the Long Beach and Rincon fields and many feel that the present lull will be followed by a big spurt.

The Long Beach field still remains a puzzle. Only two wells were completed during the week, and they threw little light on the situation. A dozen wells are in and nearing the sand and should be completed within two weeks.

Another major company has entered the Rincon field and the drilling program there continues to grow. Several wells are nearing completion and an idea of the possibilities probably will be gained within the next month. The first sand promises to offer some difficult problems and it is believed that if the upper stratum proves unusually tricky, the lower levels will be tested.

Several new areas are bidding for recognition, but none has proved worthy of note. Edison, Potrero and the Bakersfield district are being watched, but the chance for an upset in any one of these areas is considered very remote.

Domestic and foreign movements of both gasoline and fuel oil are fairly satisfactory in California, with no change in prices. The domestic consumption of gasoline was very high during the first week of the year.

TULSA—It's hard to be optimistic about crude market conditions in Oklahoma, when Seminole is showing an increase of 24,000 barrels in seven days, unless far fetched consolation is found in likening it to the dying patient who comes back strong just before the last stretch. And Seminole has been likened to almost everything else without having its freakish course altered.

A comeback in Greater Seminole's daily yield from 326,000 to 350,000 barrels was registered from January 2 to 9, all of which shows in the end, if the rise ends with Monday's gauge, nothing materially was gained by the freeze that gave rise to the sharp slump with the opening of the new year. An increase of only 700 barrels Monday over Sunday's output offered a check in the comeback, as this was approximately the area's production prior to the freeze.

There is comparatively little new oil in sight at Seminole with recent completions showing small returns, and operations declining on an average of about seven a week, with only 123 wells drilling early in January. Barring any new inside strikes of outstanding importance, the area should lose 50,000 barrels by February 1, and Earlsboro should be the heavy loser, it being the one pool showing the flush.

Magnolia Extending Purchases of West Texas Oil; Big Contract With Landreth

Fort Worth, Texas—The second largest contract involving deliveries of West Texas crude during 1928 was closed January 6 in Dallas when E. A. Landreth, president of the Landreth Production Corporation, agreed to deliver Magnolia Petroleum Company about 2,700,000 barrels of Church and Fields crude at Humble Oil & Refining Company's posted price in effect from day to day. Acceptance of this contract by Magnolia automatically boosted its current pipe line runs in the West Texas district to almost double the maximum daily output of its eight-inch trunk line system, thus necessitating a larger tank building program immediately in the West Texas district.

Pipe line connections were completed early this week by the Magnolia Pipe Line Company to the 16 producing wells on Landreth Production Corporation's strip lease, which forms a dividing line between the Church and Fields and Gulf-McElroy areas. According to the terms of the contract entered into by these two concerns, Magnolia is to run and purchase 7500 barrels of crude daily until the close of 1928, and when production drops below this amount the deficit will be made up from field storage held by Landreth. Landreth's lease consists of a strip 400 feet wide and 3.8 miles in length, and a daily average production of 10,940 barrels was maintained during the past week on this property. Landreth has been forced to carry out the largest tank building program entered into by a small company in the West Texas district to take care of his oil, owing to inadequate pipe line outlet heretofore, and has erected 31 55's and 12 80's on and near this production, with approximately 2,200,000 barrels of crude in storage now.

Magnolia Petroleum Company is reported to have started running oil during the past week from the Texon Oil & Land Company's pinched in well in the Hendrick field, Winkler County, to afford temporary relief to Texon until its pipe line to railroad and new field storage can be erected, while Magnolia has also agreed to handle the expected production from Owen-Sloan Oil Company's deep test on the Roberts ranch, Howard County. The latter concern passed up a commercial well at 2570-90 feet last week to try for the flush pay uncovered in a west offset producer completed by Magnolia last October at 2990 feet.

A most favorable interest has been shown by Magnolia in recent weeks on boosting its crude runs from the West Texas district, and contracts made during December and January for outside oil has increased crude runs to approximately 35,000 barrels daily from Howard, Crane and Winkler Counties. Magnolia Pipe Line Company's eight-inch trunk line, which extends from the Church and Fields area, Crane County, via a big tank farm at Midland, thence to the Gulf Coast via DeLeon and Corsicana stations, has a maximum daily capacity of 17,500 barrels daily, with four main line stations between the western terminus and DeLeon station. Announcement has previously been made to the effect that Magnolia has a long time contract to handle 10,000 barrels of West Texas crude daily for Atlantic Oil Producing Company on a common carrier basis, with deliveries being made to the Gulf Coast at Atreco, which is Atlantic's export terminals. Announcement was also made last week in these columns that Magnolia had agreed to take two-thirds of Simms Oil Company's Church and Fields production for six months beginning December 1, 1927, with renewal privileges, and give Simms' plant at Dallas a similar amount of South Oklahoma crude. This deal involves about 6000 barrels of crude daily. Magnolia Petroleum Company has about 12,000 barrels of West Texas production scattered over Winkler, Crane, Howard and Mitchell Counties, and is asking delivery on its royalty oil in Winkler County, as considerable royalty interests were acquired in the Hendrick fields by Magnolia shortly after the completion of the discovery well.

Humble apparently is not going to carry out its original plans to sever its pipe line connections with the operators that refuse to sign a contract to deliver daily production to Humble for a period of three years, as a 10-day extension has been granted the Pecos Oil Company to agree to the terms of the contract. Humble withdrew its connections from the Pecos Oil Company's Church and Fields lease for 24 hours, and then reinstated. Instead of taking out its pipe line connection with the Eastland Oil Company-Collett-O'Keefe lease, Humble reduced its daily runs from 5000 to 4000 barrels, although members of the latter partnership were previously advised that all pipe line connections would be withdrawn on January 1, unless the signed contract was sent in. Gulf Production Company broke off its connections with Humble Pipe Line Company in the McCamey district last Wednesday and Thursday in lieu of tendering Humble a three-year contract to run this production.

Pearson Pool Extended

Tulsa.—Gypsy Oil Company's Cecil 1, in the southwest corner of the northeast quarter of Section 19-7-4, southern Pottawatomie County, widened the productive area of Pearson pool on the northeast end one location, January 4, making an initial of 40 barrels an hour from Hunton lime found at 3791 and drilled to 3840 feet. Late in the week it was pinched to about 20 barrels an hour.

L. L. Foley, Mid-Kansas Oil & Gas Company geologist, was elected president of the Tulsa Geological Society at the annual meeting of the organization January 7. E. O. Markley of the Carter Oil Company was re-elected as secretary-treasurer of the society.

Wider Markets Suggested as Situation Cure

Industry has spent years of efforts to stimulate production and is now coming to economic principles which have stabilized maturer industries

By JOSEPH E. POGUE
Author of "The Economies of Petroleum"

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THE petroleum industry has brought to a close a year of overproduction, and in consequence a year lean in profits and provocative of little satisfaction to its members. During the twelve months just ended supply exceeded demand by 62 million barrels, an excess of 6.5 per cent., which went into storage.

One oil field, alone, Seminole, contributed during this period approximately 132,000,000 barrels of gasoline-rich crude oil—13 per cent. of the total supply of all oil and more than twice the volume of the excess oil forced into tankage. Of the contribution made by Seminole more than half may be attributed to the employment of a relatively new engineering technic, the gas-air lift, which speeded up the rate of extraction of the oil from the ground and brought to the surface in one year what would normally be extracted in several. It is a strange coincidence that the yield resulting from the application of this technic was almost identical with the statistical measure of overproduction.

Looking back over the post-war years in the petroleum industry, one finds an almost unbroken period of overproduction, as indicated by the additions of oil to storage in every year save 1926. The figures illustrating the outdistancing of demand by supply are shown as follows:

Change in Stocks of All Oils

(In Millions of Barrels)

1918	— 25	1923	+101
1919	+ 7	1924	+ 31
1920	+ 28	1925	+ 28
1921	+ 84	1926	— 25
1922	+102	1927	+ 62

Supply Overstimulated

Obviously, during this period, supply has been overstimulated. The popular explanation for this result attributes it to competitive drilling along property lines in subdivided oil pools, where it is held that diverse property rights force offset drilling and established laws prevent cooperative restraint. While undoubtedly a factor of prime importance, competitive drilling should scarcely be called upon to shoulder the full responsibility, for there are other forces that have operated in even a more fundamental manner—forces purely economic in their origin.

For example, capital has been drawn into the oil business in excessive amounts under the influence of large expected profits; the price level for crude petroleum has been influenced by speculative considerations, with the result that prices have been slow to decline in periods of flush overproduction and quick to advance in anticipation of statistical recovery, thus maintaining an undue stimulus on supply; speculation in inventories has distorted economic prospective within the industry; and, perhaps more important than all, the industry has directed the powerful force of technology toward the expansion of supply and achieved almost revolutionary results in accelerating oil discovery, speeding up the rate of oil extraction and enlarging the recovery of gasoline and lubricating oils from the raw material.

Thus the state of overproduction in which the oil industry now finds itself may be attributed to economic stimuli, working through momentous improvements in technology bearing upon supply, aggravated by peculiar conditions of competition in the subdivided oil pool.

Depression Began in 1926

The current cycle of depression in the oil industry began in the fall of 1926, when supply of both crude oil and refined products began to run ahead of requirements, following a period of drafts on storage and of profitable prices. Minor price cuts were made, but in a degree inadequate to retard expansion in either crude oil production or refinery operations. Nineteen twenty-seven was therefore entered with refineries running at excessive levels, the great Seminole field looming ahead, and West Texas in the offing. Before spring, crude oil output had risen to 2,500,000 barrels per day, about 14 per cent above requirements, and the effects of refinery overproduction were beginning to be critically felt in constant recessions in the quotations for gasoline at wholesale. Only then did drastic cuts eventuate in the price of crude petroleum, but too late to stem the tide of drilling in the Seminole district that had got fully under way under the influence of a price that promised an almost unprecedented profit. The use of the gas-air lift in this field doubled the period of flow on the gushers and even made huge producers of wells which would not naturally flow. The flood of Seminole oil, convertible into 70-80 per cent of gasoline with the aid of cracking, dominated the petroleum markets of 1927.

The Seminole district reached a peak of 527,000 barrels per day in July, but would have gone higher except for co-operative proration instituted when output promised to exceed handling facilities. During the closing months of the year the flow from the established pools of the Seminole field gradually subsided to below 400,000 barrels per day, but in the meantime six or eight new pools were located in the area. Since it appeared unprofitable to drill these new areas under a price level that had fallen to levels approximating the cost of production, the operators agreed to shut in the discovery wells and abstain from all surrounding drilling until January 1, 1927, and this agreement was subsequently extended to March 1, 1927. If this agreement is followed, the old pools at Seminole will have an opportunity to decline substantially before new increments to this preferred grade of oil can be brought upon the market.

Liquidation in Gasoline

One of the interesting features of the year was a substantial liquidation in gasoline stocks, despite the gross overproduction of light or gasoline-rich crude oil. For example, on October 31 gasoline stocks had receded to a level of 29.6 million barrels, a decline of 4.1 million barrels, or 12.4 per cent, from the stocks on hand at the corresponding time in 1926. This relative improvement in the storage position for gasoline was brought about by the low prices prevailing for the commodity, which dropped to levels discouraging the use of the higher-cost cracking stills and thus retarded the normal expansion in output of cracked gasoline. As soon as price conditions change, however, the output of cracked gasoline can be increased. Illustrative of the retardation effected in output of cracked gasoline is the fact that the rate of cracked gasoline in October, 1927, was 291,000 barrels a day, as compared with 290,000 barrels a day in December, 1926, whereas in the preceding 12 months the rate of output increased 10.5 per cent.

During the later months of 1927, while the old pools of the Seminole district were slowly declining and drilling was undergoing price-dictated restraint around the new discoveries in that area, field developments were progressing rapidly in

three other important regions—West Texas, California and Venezuela.

Though undergoing exploration for several years, it was not until 1927 that the Permian salt basin of West Texas clearly indicated its importance as a major source of large supplies of cheap oil. Three pools of extensive size—the Yates in Pecos County, the McElroy-University in Crane and Upton Counties, and the Hendrick in Winkler County—are now involved in active drilling and wildcatting is indicative of further discoveries of importance. The region already has developed potentialities considerably in excess of transportation facilities and this is likely to be the case for some time to come, despite the steady expansion in means for moving the oil to markets. Although low in cost because of shallow depths and huge per well yields, the oil is inferior in quality, having a large sulphur content, which adds to the refining cost, and running only about 25 per cent in gasoline. For a time, at least, this oil will consequently have its chief effect in expanding the supply of fuel oil.

California Campaign

In California a competitive deepening campaign has recently got under way in the old Long Beach pool, one of the most remarkable oil deposits in this country, which has already yielded a quarter of a billion barrels. The objective of this renewed drilling is a deep horizon lying between 5500 and 6000 feet, and the supply of California oil is expected to be substantially augumented by this development.

Again, in the Maracaibo basin of Venezuela, field developments have been going on apace, although here the best acreage is almost wholly confined to the lands of three groups of interests, and hence overproduction cannot be attributed to the competitive efforts of the small land owner. The developed potential production of Venezuela is also in excess of transportation facilities, although the latter are undergoing expansion at a fairly rapid rate. This oil is likewise low in cost and of a fuel-oil grade. The competition between Venezuelan and West Texas crudes has been responsible for the recent recessions in the fuel oil market.

The course of overproduction during 1927 has been followed by a somewhat tardy, but nevertheless drastic, decline in oil prices. A comparative view of the price situation is afforded in the table accompanying this article. Naturally, this price situation has resulted in the impairment of earnings on the part of oil companies. While the results for the full year are not yet available, the quarterly reports of 23 oil companies reveal a net income of $56,000,000 for the first nine months of 1927 against $132,000,000 for the corresponding period of 1926, a decline of 58 per cent.

As the year progressed the industry has directed growing attention to the intricate problem of gaining greater economic control over supply. In the specific instances of the Seminole field and the Yates pool, restraint has been exercised by voluntary co-operation, but in each instance, be it noted, the restriction has followed the necessity rather than anticipated it, except that the recent action on the part of Seminole operators in extending their drilling shutdown around new areas until March 1 has elements of anticipation within it.

U. S. Oil Conservation

The Federal Oil Conservation Board has taken active steps in the study of the so-called oil problem and has recently appointed a committee of nine, representative of the government, the oil industry and the American Bar Association, to study the economic and legal aspects of overproduction and to recommend legislation relating thereto. Again, at the annual convention of the American Petroleum Institute in December, the oil industry went on record as favoring a policy of State legislation to effect conservation of natural gas as a means of regulating crude oil production. Thus far most of the efforts looking toward the control of supply have been directed more along legalistic channels than in economic directions where some observers, at least, believe the goal of fundamental solution lies.

Always difficult to forecast, because of the ever-present uncertainty as to the discovery of new flush fields, the petroleum outlook is additionally obscured at this time by the large supply of potential and suppressed production in sight, the instability of such a situation and the indeterminateness inherent in the industrial efforts now being initiated to achieve a more rational production. Having spent years of effort in stimulating every possible factor bearing upon an enlargement of supply, the petroleum industry will now doubtless address itself more directly to the task of gaining better control of its productive operations and to the promotion of technology making for an expansion in its markets, thus coming to utilize the economic principles that have stabilized the maturer industries.

	By Quarters, 1927				By Years		%
	1st.	2d.	3d.	4th.	1926	1927	Chge.
Crude petroleum ($ per bbl.)	1.77	1.51	1.47	1.46	2.03	1.55	—21
Tankwagon gasoline (c. per gal.)	16.6	14.8	14.4	14.2	17.5	15.0	—14
Tankwagon kerosene (c. per gal.)	13.5	12.9	12.6	12.6	14.7	12.9	—12
Fuel oil, at wholesale ($ per bbl.)	1.46	1.13	1.01	.982	1.47	1.14	—22
Lubricating oils, jobbing (c. per gal.)	24.8	25.6	25.9	25.0	26.1	25.3	— 3

Trinity Sand Production in Cotton Valley Field

Shreveport, La.—The Woodley Petroleum Company today brought in their Cox B-1, in section 23-21-10, Webster Parish, Cotton Valley field, flowing about 20 barrels of light oil, from a depth of 4737 feet, thereby establishing the first Trinity sand production in the Cotton Valley field.

The completion of this well is of extreme importance to the oil fraternity of North Louisiana, since it definitely assures the possibilities of the Trinity horizon in this section. While the well is not a large producer, the mere fact that it is actually producing a light green oil of a gravity of between 45 and 50 degrees, is, in itself of vast importance, as it puts to rout a long believed thought that the Trinity sand would not produce oil in this section. The Woodley well was deepened from the regular deep producing level at which the gas production is now being secured in the field, around 4500 to 4600 feet, in an effort to increase its output of gas. When it was tested it was found that there was a leak in the final string of casing between 3500 and 3700 feet, which allowed a quantity of mud and salt water to flow into the well. Upon being bailed down, it began flowing oil, salt water and mud at the rate of about 20 barrels per day. It is not actually known until another string of pipe has been installed in the well just how much oil the well will flow.

The Woodley Petroleum Company's Cox B-1 well is the second deepest well in the Cotton Valley field. The deepest well in the field was drilled to 5957 feet by the Ohio Oil Company, in the southeast part of the same section in which the Woodley well is located, approximately one-half mile distance between the two, later being abandoned and plugged back to the regular producing gas sand, where it was completed as a gas well. Woodley's well is the first to actually produce oil from the Trinity sand, although there was at one time a report current to the effect that a sand had been found in a deep well drilled in section 27-21-10. However, no oil was ever produced from the well; in fact no one can be found who actually saw the sand. The fact that the Woodley well is unmistakably producing a light gravity, green oil and not condensed gasoline, as is usually produced from the deep wells in this section, is arousing more than usual interest among oil men here; and will undoubtedly result in the deepening of gas wells now producing in this field, and the drilling of new Trinity sand wells from the top of the ground down.

Burbank Completions

Tulsa.—Peters Petroleum Company's No. 8, in the southeast of the southeast of the northwest of Section 17-27-6, Osage County, on the eastern edge of Burbank field, which had an initial of 1600 barrels from 2901-50 feet early last week, was holding at 1400 barrels natural flow five days after completion.

Other success in development along the eastern flank of Burbank the first week in January is seen in Kewanee Oil & Gas Company's completion of two profitable producers. No. 7, located in the southeast of the northeast of the northeast of Section 3-26-6, was a 400-barrel well from 2745-2815 feet, and No. 7, in the northwest of the southwest of the southeast of Section 34-27-6, made 320 barrels the first 15 hours after a 100-quart shot in sand topped at 2752 feet and drilled to 2834 feet.

Union Oil Has Novel Employe Patent Policy Plan

FOR the past year the Union Oil Company of California has had in effect a definite patent policy plan that carries with it material benefits to employe inventors. This plan possesses features both for employer and employe that can well be adopted by other oil companies having a far-sighted vision of what the relationships existing between employer and employe should be.

The first announcement of the company's patent policy plan was made in the December, 1926, issue of the Union Oil Bulletin, house organ of the Union Oil Company of California.

At that time the company stated the purpose of the plan to be as follows:

"In order to stimulate and assist inventive genius and to provide still another means for unifying and promoting the interests of both company and employes, Union Oil Company of California has adopted a uniform policy respecting patentable inventions. Under the provisions of this new patent policy plan, the company will enter into an agreement with the employe to prosecute for patent such useful inventions as he may make, and handle the patents with suitable awards for the mutual advantage of both."

Administration of the company's plan is in the hands of three members of the executive committee who, in turn, appoint a working committee of competent experts to prepare and present all data in in each case for final consideration and award.

Operation of Plan

The employe of the company who conceives an invention embracing any device, apparatus, method, process or improvement relating to the business of the company assigns to the company his entire right in the particular invention that he has conceived and, at the expense of the company, assists in every way to accomplish letters patent.

When the employe conceives an idea, he promptly submits a description of his invention to the administrators who, then, solicit the written opinions of department heads, and other interested parties regarding the invention. The company proceeds to file patent applications, after the administration has decided that the disclosure represents something that would be useful in the company's business and is patentable. If the administrators reject the employe's idea, the disclosure is returned to the employe with properly executed release from the agreement.

Benefit to Employe

The plan as now in effect provides that upon the acceptance of the disclosure and execution of the patent application and assignment, the employe be paid a primary award of $100. If the invention is licensed, additional compensation is received by the employe on the basis of half the net profit so derived from licensees. If the patent is sold outright, the employe receives half the net profits resulting from the sale. Additional compensation may be awarded the employe by the administrators, with the approval of the board of directors, if greatly increased profits are enjoyed by the company as a direct result of the use of the employe's invention.

Agreement to this patent policy plan is now a condition of employment with the Union Oil Company, but when first placed into effect, agreement to same was made optional with present employes.

The company's patent plan is further discussed by Philip Subkow, patent engineer for the Union Oil Company of California, in an article appearing in the August, 1927, issue of the Union Oil Bulletin. Because this article so thoroughly describes the company's attitude toward the employe in the matter of patents and since this is an attitude that, for their own interests, can well be taken by other companies, much of the article is given in succeeding paragraphs as it appeared originally in the Bulletin.

"Patents are obtainable for inventions and are based on disclosure. The patent policy plan of the Union Oil Company of California, in part, operates by determining the patentability of such disclosures. It specifies that on sale, or license, of the patents to others, the company will share with the inventor in the profits thus obtained. If the proposed invention is not accepted, the disclosure is returned to the inventor, the company keeping only such shop rights to which it is legally entitled.

"This company feels that just as an employe has an obligation to it, to promote its interests by aiding in the development of improved devices and processes by which its activities may be facilitated and made profitable, it should see that they are justly rewarded, even before patent protection starts. This company, like all other corporate employers, must depend on the activity, alertness, initiative and inventiveness of its employes to see that it has the tools with which to meet profitably an ever growing competition and an ever changing situation. It is true, the primary function of an employe is to do his job efficiently and profitably. This is, in the main, the measure of his value to the company. However, the duty of the employes to this company does not end by the doing of their jobs efficiently in the conventional manner, by the employment of the old tools and old processes, profitably, at the moment. The company has the right to expect that its employes will enable it to operate profitably if a change in the industry makes the old methods obsolete, or if the situation is unchanged, to alter the process and tools so that a greater profit is realized. The person who combines this inventive initiative with a practical ability to operate the tools, and processes now at his command, is doubly valuable. This company has established a large staff of capable research men to search, and aid others in the search of these improvements, but also, it welcomes developments and inventions from its other employes. The company co-operates with the inventor to the end that his developments be protected and his work made to count to the maximum. It feels that the inventor has placed himself in a special position and it, therefore, is prepared to reward him. That is the purpose of the patent policy plan. It plans to extend the benefits of the inventions to the public so that they may share in the advances by its employes. This policy also insures to the employe the advantages of participation in the just rewards thus obtained by sharing with him in royalties or other profits thus realized. This plan is a departure from the traditional policy of employers. It can be said, justly, that the rule is that inventions by employes belong to the employer because of special contracts of employment.

"The policy of liberally rewarding the inventor, employed by the Union Oil Company depends upon the co-operation of the various employes of the company. The best inventions may be futile if there is not willingness on the part of all to merit them. The success of this plan will depend on the manner with which the inventors come forward with their inventions. It is understandable that each inventor believes that his invention is worth fabulous sums, and it is true that in an industry of this magnitude, a small advance, yielding a small saving per unit, may in a short period result in large profits. In addition to this there is the natural pride of the inventor in his creation. This results in a secretiveness and a fear that someone will steal the invention and so deprive him of his due share of money and glory.

"Such an attitude has no place in the Union Oil Company. The patent policy plan assures to the inventor that he will get just recognition for any invention that he may make. He may, if he wishes, call it to the attention of the patent policy administrators direct. It is investigated, and the scope of his invention determined by the company. By submitting his disclosure, duly executed, he has definitely de-

fined his invention. No one can take from him any portion of his just reward.

"The company is interested in obtaining the most from the inventiveness of its members. It, therefore, brings the various abilities and talents at its command to bear upon the problem to the end that they all co-operate and develop the invention. This is to the benefit of the inventor, since it insures for him a speedier success. If other members of this company develop improvements, this is to the advantage of the various inventors and of the company. Each inventor is certain of protection for his invention. To him who has discovered the broad principle goes the broad dominant patent, and to him who has made the improvement goes the narrower patent covering his improvement. Additionally, the various inventors are assured that the broad and improvement patents are not in competitive and, therefore, antagonistic hands. This is especially important if the improvement is the practical embodiment of the broad idea. Were it not for the fact that the company holds both patents, the various inventors may find themselves in the position where the holder of the broad patent will not be able to use the improvement vital to the practical success of the idea, while the owner of the improvement patent cannot use it without infringement of the broader patent. Some sort of agreement and some division of rewards between the basic and the improvement patentees is essential to the exploitation of the invention. In like manner, the company apportions the rewards between him who had made the basic invention and him who has the practical concept, the use of which is desired.

"The rewards as provided by the patent policy plan are of fourfold nature. As suggested here, one is the prestige that comes from the origination of a useful and patentable invention which enables the company to profit from its use. Second, the plan provides that in addition to the $100 paid to the inventor on acceptance of the idea under the plan, the company may in such cases where it has profited by the invention, give a greater sum to the inventor. Thirdly, the plan provides that the company may license others under the patent or sell the patent outright. The inventor will share equally with the company in the net profits thus obtained. Fourth, the inventor is saved the cost of patenting, which may prove to be an important consideration. The necessity of protecting the basic invention by improvement patents adds an additional burden. If the inventor should encounter difficulties necessitating appeals to the higher tribunals of the patent office, or to the courts, or must fight interferences with other inventors who may have filed applications for similar inventions, the cost of patenting may become prohibitive for the inventor of ordinary means. The Union Oil Company has resources to patent and exploit the invention and will give, in addition, considerable prestige to the negotiations leading to licensing or sale of the patent. The inventor will find that he will obtain considerably greater rewards as a result of this patent policy plan than if he were to proceed with the patenting and exploitation of the invention on his own resources."

In the Union Oil Bulletin for September, 1927, E. G. Ragatz, an employe of the Union Oil Company, summarizes and comments upon the advantages to the employe of the patent policy plan under discussion, as follows:

No Cash Outlay Required

"Any proposition of the nature of the patent policy plan must be considered in the light of the "majority effect" of the same. The majority of employes who may conceive of a patentable idea do not have the necessary available capital for properly prosecuting their patent application. Lacking capital, they are immediately faced with the problem of prosecuting the application through the services of a poorly qualified solicitor, or of signing away a goodly share of their equity in return for legal financing. If they choose the cheaper solicitor, they may get a good patent, but the chances are against it; if they seek to finance the proper prosecution of the patent with outside assistance, the pitfalls are many and obvious, of which the loss of a share of their equity may merely be the start. No such dilemma faces the employe who has access to the Union Oil Company's patent policy plan.

Application for Patent

"The patent situation in the oil business today is in an extremely chaotic condition, to say the least—patent after patent having been granted containing the same conflicting claims drawn in a slightly different manner, with all that that implies in the way of potential costly litigation. To steer a new patent application through this maze, and obtain a valid claim which will hold in court, requires the services not only of the best of patent solicitors, but the services of a specialist in petroleum practice; such specialized services are available under the patent policy plan.

Development of Conception

"In the vast majority of cases, the original patent conception is merely the start—the signpost pointing the right direction. After the conception must come the cutting and trying, the experimentation and development, the gradual evolution of a commercially feasible process or apparatus. During this development, the employe-inventor has the advantage of the entire development resources of the company back of his idea—an advantage that can not help but change many an otherwise helpless conception into a valuable commercial proposition.

Protection Against Infringement

"Some business organizations are ruthless in their attitude toward patent infringements—particularly when backed by conceivably conflicting patent claims which they may own or control. Such an organization will not hesitate to look up the financial standing of an individual, use his patented idea, and 'let him sue'—if he can afford to. When the patent is owned by a corporation which is a leader in the industry, however, the matter of infringement is given greater thought, and if infringement still is resorted to, then the whole legal staff of the corporation-owner is available for protection of that patent.

"A large corporation is in personal contact with the entire industry, and as such, is immeasurably better situated for furthering the exploitation of a process or apparatus than is the individual inventor.

"The advantage involved in the use of the company's prestige, together with its available legal and business advice, for effecting the very best terms possible in exploiting the patent is obvious. Such an advantage the average employe-inventor could never hope to obtain as an individual—as a consequence, if he should obtain a valid patent covering a commercially practicable idea, he may lose part or all of his rightful equity in the same at the 'exploitation' of its development.

Share in Profits

"The Union Oil Company's patent policy plan specifically states that 'The company will endeavor to conclude license agreements or outright sales when desirable, to the end that the interests of both the company and the employe may best be served'—and that the employe-inventor will share 50-50 with the company in the net profits of such exploitation. This is a straightforward expression of the spirit of the entire plan, and as such will, in the majority of cases, return considerably more in actual cash to the inventor than if he owned the entire patent outright and had to develop, finance and exploit the same 'on his own.'

$100 Paid on Acceptance

"One hundred dollars may not appear to be a great deal—yet this amount is paid upon acceptance by the company of the application for prosecution, even though the accepted application may actually prove to be worth not a nickel, due to ante-dating unissued applications on file in the patent office. In such a case, the employe is just that much to the good, in place of being out the corresponding attorney fees required for developing the lack of validity of his conception.

"No worth-while business transaction is ever a one-sided affair. In participating in the Union Oil Company's patent policy plan, the employe-inventor receives the direct personal benefits outlined above. In return, while not discounting the value of its share of exploitation profits, the company hopes, as its most important dividend from this policy, to develop a stimulation of inventive effort to the end that the efficiency of its operating equipment and forces may steadily increase. Such an increase in efficiency must, in turn, directly benefit all who are connected with the organization, be they employes, stockholders, or both."

Eleven awards have been made by the company to date. Four of these awards have been retroactive benefiting T. F. Ott, Ralph C. Pollock, Robert A. Dunham and E. G. Ragatz.

The remaining seven awards have been made on disclosures submitted since the establishment of the patent policy plan and were received by A. G. Page, F. W. Lake, Philip Subkow, B. O. Bushnell, L. Adams, C. A. Peabody and Vladimir Kalichevsky.

Seminole Output Climbs With Moderate Weather

Operations continue to decline and only five locations were staked during the first week of the new year

By WALLACE DAVIS
Staff Representative

TULSA—The sudden unheralded revival of production in Greater Seminole following the low level of 326,428 barrels January 2, continued over the past week-end to a much stronger degree than was expected. A slowing down of this increase Monday, when the five fields showed a gain of only 749 barrels over the previous day, is the first indication that the comeback is likely to stop.

Production for the Monday morning gauge showed 350,971 barrels from 1066 wells; a well average of 329 barrels, or an increase of 11 barrels per well over that for the corresponding day last week. Production by fields for January 8 and 9 is compared with that of January 2 in the following table:

Field—	Jan 9	Jan. 8	Jan 2
Bowlegs	103,975	103,885	102,085
Earlsboro	132,472	132,078	117,009
Seminole	56,484	56,891	52,752
Searight	20,627	20,202	19,934
Little River	37,413	37,166	34,684
Total	350,971	350,222	326,428

That the recent increase has been from Earlsboro, excepting about 4000 barrels in Seminole City and 3000 barrels at Little River, and that the little fluctuation over Sunday offers an end to the rise there, it is likely that the crest of the flood of increase is past.

The menace of present Seminole overproduction apparently lies in old producers, which continue strong. Few new wells of value are being added to the list on big pay, and new oil within the past month is almost negligent in comparison with that of the early fall of 1927.

Operations Continue Decline

Operations in the area continue to decline, a decrease of seven shown in the field survey of last week. Five locations were staked in the five fields during the first week in January. At that time there were 16 rigs up, an increase of six over the previous week. Fourteen wells were shut down, six drilling above 2000 feet, 11 wells between 2000 and 3100 feet, 20 between 3100 and 3700 feet, and 86 drilling below standardized depth. Included among the wells below the 3700-foot level were 30 at Bowlegs, 22 at Earlsboro, eight at Searight, one in Seminole City field and 25 at Little River.

A survey of the area at the opening of the new year showed 327 of the producers showing water, or 31 per cent of the producers. Only 12 per cent of the producers were flowing natural, or 122 wells. Air or gas lift was being used on 475, or 45 per cent of the wells, 223, or 21 per cent were pumping, and 130 were on the swab. Ten per cent, or 108 wells, were off production at the time the field survey was made.

Indian Territory Illuminating Oil Company's rank wildcat test in the southeast corner of the southwest quarter of section 16-8-5, held the center of attention of the week-end with indications pointing to a producer. The Sylvan was topped at 4114 feet in this hole, about five feet higher than it was found in Barnsdall's Fife 1 producer in section 14-8-5. I. T. I. O. Company's wildcat lies two miles west and a mile south of the Barnsdall discovery well a little more than four miles west of Bowlegs field, which made 100 barrels an hour from four feet in the Wilcox sand. I. T. I. O.'s test was at 4182 feet Monday, trying to set 6⅝-inch pipe to prevent the hole caving, a source of trouble which developed last week, and which has delayed operations considerably.

In the event of a producer at this location production will be shut in to observe the proration agreement as are the other wildcat producers in this area.

Shutdown Modification

A departure from the original Seminole shutdown agreement now likely is the allowing of development of acreage offsetting producers to the south of the Little River pool. Discoveries such as Snowden & McSweeney's Tiger 1, in the northwest corner of section 13-7-6, more than a mile south of Little River proper, and the recent strike of Carter Oil Company in its Jackson 1, in the northeast of the northwest of section 11-7-6, a quarter of a mile south of the edge of production, have been proving factors in linking up the Little River area with the strike of Independent Oil & Gas Company in its Harris 1, in section 22-7-6. It is figured that inasmuch as this territory to the south of Little River pool is simply a continuation of the field proper that it has the right to play as inside production, restricting itself, of course, to the production limitation inaugurated.

Such a program of development after March 1 would not, however, have any effect on what might be done around such discoveries at the Barnsdall well in section 14-8-5, Mid-Continent's strike in section 5-7-7, and other new production to the west of Little River and Bowlegs fields. While the Carter Oil Company's Jackson 1 and Snowden & McSweeney's Tiger 1 have proven comparatively weak wells when compared with the average inside locations of the five fields, Independent's Harris 1 stands out as a strong well with an initial of more than 100 barrels an hour. Monday it flowed 108 barrels, pinched in. Such a departure from the regular restrictions in the area would mean Little River's move into the front rank of Seminole fields in activity. On the other hand, the odds are against it to ever develop production equal to that of Earlsboro, Bowlegs and Seminole City, if past performance in the original end of the pool can be taken as a criterion.

Only two new wells were added to the area over Sunday. Barnsdall's Bruner 2, in the southeast of the southwest of section 2-9-5, Earlsboro, swabbed 80 barrels in 10 hours ending 7 a.m., Monday, from Wilcox topped at 4313 feet and drilled to 4322 feet. Independent & White Eagle's Davis 2, in the northwest of the southwest of the southeast of section 2-7-6, Little River, swabbed 515 barrels in 22 hours Sunday after finding the Wilcox at 4412 feet and drilling in six feet.

Phillips Petroleum Buys Lost Springs Lease

Bartlesville,—Phillips Petroleum Company, on January 6, bought the holdings of Winters & Harwood, Wichita, Kansas, producers, in the Lost Springs field of Marion County, Kansas, the consideration being on a basis of $600,000. Through this purchase, Phillips Petroleum Company acquires control of the major part of the field which was opened a year ago and which now has four producers estimated good for around 2500 barrels combined, but at present pinched to approximately 200 barrels, due to low crude prices.

Phillips Petroleum Company entered the Lost Springs pool shortly after its discovery, by purchasing F. C. Frank's 7/15 interest in the properties of Winters & Harwood there, the entire holdings being the Raznicek 1, discovery well in the southwest of the northwest of Section 22-17-4, and 1280 acres of nearby leases. The Phillips Petroleum's buy last week included the remaining 8/15.

Prairie Oil & Gas Company and Sinclair Oil & Gas Company each have one producer offsetting the discovery well.

Geologists To Have Meet in San Francisco

Tulsa.—The thirteenth annual meeting of the American Association of Petroleum Geologists will be held in California, an announcement coming from J. P. D. Hull, business manager of the association, says. Business and technical sessions will be held in San Francisco March 21-23, at the Clift Hotel and the Native Sons Auditorium. Entertainments and field trips will be provided at Los Angeles March 24-25.

The committee on arrangements for the meeting has been announced by President Gester as follows: E. G. Gaylord, San Francisco, chairman; C. R. McCollom, Los Angeles, and H. J. Hawley, San Francisco, vice-chairmen; W. S. W. Kew, Los Angeles, program; Joseph Jensen, San Francisco, publicity and exhibits; J. T. Wood, San Francisco, hotels; S. H. Gester, San Francisco, registration; J. E. Elliot, Los Angeles, finance; Irving Augur, Los Angeles, entertainment, and H. J. Hawley, transportation.

Information concerning hotel accommodations and registrations will be outlined in a circular letter to be mailed soon by the local committee. Advance inquiries should be addressed to J. T. Wood, care of the Associated Oil Company, 79 New Montgomery Street, San Francisco. The program of technical papers is now being arranged by W. S. W. Kew, and all matters regarding the presentation of papers should be submitted direct to Dr. Kew, Box 1390, Station C., Los Angeles.

The announcement says that in the near future, transportation advices will be broadcast by special announcements by the committee on arrangements.

Cold Weather Reduces Oxford Production

Tulsa.—As the fortieth well was nearing completion at Oxford late last week, the total production of the field, townsite and extension on the southwest, was undergoing a continued drop, showing 9925 barrels Thursday, more than 5000 barrels below the peak established about the middle of December. Cold weather has had its effect on this Kansas field, and 18 out of the 38 producers were temporarily off production.

Roxana Petroleum Corporation's Buffington 2, in the southern end of outlot 9, on the east side of the Midland Valley right-of-way, had the top of the Stalnaker sand at 2020 feet, and at 12 feet in filled 1400 feet with oil. Drilling was being continued late in the week to take in nearly 100 feet of the pay before completing the well.

Alco Oil Company and Amerada's Gassaway 2, in the southeast corner of the southwest of Section 14-32-2, a half mile south of the townsite production, had the Stalnaker sand from 2007 feet to 2106 feet. Late in the week it was preparing for a shot after a 24-hour swab test. It had 1900 feet of oil in the hole after reaching 2106 feet in the sand. Gassaway 2 is a north offset to Poling et al's Wenrich 1, which is making 350 barrels on the pump.

Sixty-two wells in the Churchill pool, three miles north of Oxford, were making 9775 barrels late in the week; four wells in the Miller area were making 106 barrels; the Slick-Carson pool, 520 barrels; the Waite-Carter, 475 barrels, and the Rainbow Bend field, 1490 barrels, bringing the total of the area to around 22,300 barrels.

Start Delivery of Texas Gas at Wichita

Wichita, Kansas.—Natural gas from the Texas Panhandle was turned into the Cities Service Company's 267-mile, 20-inch gas line to serve Wichita for both domestic and industrial purposes, December 30, marking the completion, except for final touches, of the $15,000,000 gas line project. This line, about 250 miles of which is 20-inch, and 267 miles total, including gathering lines around Pampa, Texas, was built by Booth and Flinn of Pittsburgh in approximately eight months.

While Wichita is the present terminal of the line, its construction means either supplying or augmenting the natural gas supply of 135 cities and towns in Oklahoma, Kansas and Missouri that are being served by the Cities Service Company.

Supplying this gas line system are 14 completed wells of the Empire Companies on the Burk Burnett Ranch of Carson County, which comprises 65,000 acres. The capacity of these 14 wells is rated at 400,000,000 cubic feet daily, approximately four times the ultimate carrying capacity of the line, the initial capacity of which is reported as 70,000,000 feet daily.

Three booster stations, located at Pampa, Texas; Moreland, Oklahoma, and at a point just south of Wichita, are operating on the line.

Next Osage Sale Planned April 1

Pawhuska, Oklahoma.—Plans are already under way for the next sale of Osage Indian leases, and April 1 is tentatively named as the date. The act of Congress providing that at least 100,000 acres of this land must be sold annually gives rise to this next sale, the 20,000 acres offered at the December 12 sale having been the only tracts sold during this fiscal year.

Since the first lease sale was held in 1912, there have been approximately 730,000 acres of Osage leases sold, bringing a total of around $106,000,000 in bonuses. Twenty-nine sales have been held, at which a total of 1,143,615 acres have been offered for sale. Slightly more than 80,000 acres remain to be sold before the end of the fiscal year, in April, since not all of the tracts offered at the December 12 sale were disposed of.

Cullinan Company Gets Spanish Contract

New York—The quantities of refined petroleum products that will be shipped to Spain by the Petroleum Export Association, Inc., will exceed 50 per cent of that country's total requirements, if the present rate of shipments is maintained, according to J. S. Cullinan, president of the American Republics Corporation. The Petroleum Export Association is a fully owned subsidiary of the American Republics Corporation.

The above statement of Mr. Cullinan was given out in order to dispose of reports being circulated to the effect that Russian interests have contracted to furnish most of Spain's requirements in refined products, and to fully confirm the fact that the greater proportion of those products will be supplied by the United States.

He explained that the contract which the Petroleum Export Association made in regard to exports to Spain specifies that the Company is to furnish "all of the crude oil and not less than 25 per cent of the refined products required by Spain for a period of five years, commencing January 1, 1928."

The contract of the Petroleum Export Association is with a company organized by a group of Spanish bankers. Under the terms of a royal decree creating an oil monopoly in Spain, that Spanish company will furnish all of the petroleum and petroleum products used in Spain.

Muskogee Lease Sale

Tulsa.—Indian leases of the Five Civilized Tribes brought $33,949 at the eleventh monthly sale, held at Muskogee January 3. Out of the 180 tracts offered, 115 were sold, establishing a record for the series of sales. Three tracts of Indian fee land brought an additional sum of $9,936.45, running the total bonus to $43,585.45. These tracts compose parts of LeFore, Hughes, Seminole, Coal, Carter, Grady and other counties in this section of the State.

Trell W. Yocum, director of the Division of Public Relations of the American Petroleum Institute, was in Houston during the past week. He came to Houston from Tulsa and Dallas where he had been in conference with some of the Institute's officials concerning the public relations program which is being planned for this year. Mr. Yocum expected to be at his New York headquarters by the last of the week.

Bureau Figures Reveal Production Decrease in November

Imports and exports drop and stocks of crude and refined oils increased; gasoline supply less than year ago measured in days supply

ACCORDING to figures released by the United States Bureau of Mines, for November, production of crude amounted to 73,778,000 barrels, or a daily average of 2,459,000 barrels. This represents a decrease of 28,000 barrels daily, as compared with October.

The greater part of the decrease in production was accounted for in California and Oklahoma. In Oklahoma, the daily average for the month fell below 800,000 barrels, for the first time in several months, according to the bureau. California showed a drop of 10,000 barrels in daily average. For the first time in nearly four years the daily average output of Arkansas was below 100,000 barrels, showing 97,400 barrels. Texas and the majority of other States showed little or no change in yield.

Statistics of the outstanding fields showed that production at Seminole held up well, with a decline of only 5000 barrels daily. The yield was kept above 400,000 barrels daily largely by means of a program of shooting wells.

The Panhandle and Seal Beach fields continued to decline, but the loss was offset in a measure by increases at Long Beach.

Drilling statistics for the four fields on November 30 were as follows: Seminole, 220 wells drilling; the Texas Panhandle, 134; Seal Beach, 7; and Long Beach, 57. Completions in these fields for November showed 99 producers for Seminole, 16 for the Panhandle, 3 for Seal Beach, and 5 for Long Beach.

Figures for the entire United States showed 1044 producers completed in November, against 1086 in October.

Crude stocks east of California continued to increase during November, but the increase was considerably below that of October. At the end of the month, stocks totaled 582,649,000 barrels, as compared with 577,427,000 barrels on October 31, a gain of 5,222,000 barrels.

Bureau figures show the total change in all oils from January to November, inclusive, to be 62,552,000 barrels. or an average monthly gain of 5,686,600 barrels, plus.

In California, stocks of light crude decreased but the usual gain prevailed in heavy oils.

Imports-Exports Drop

Imports of crude oil dropped 259,000 barrels but refined products imported during November exceeded those of October by 18,000 barrels. Exports of both crude and refined oils slumped noticeably.

Although daily average crude runs to stills in November did not quite come up to the record figures of the previous month, an increase in cracking and a new high level in blending of natural gasoline at refineries resulted in a record breaking daily average output of gasoline of 952,000 barrels, a gain of nearly 20,000 barrels over October.

Indicated daily average domestic demand for gasoline exceeded expectations in November when it amounted to 813,000 barrels, a decrease from October of only 9000 barrels. This heavy consumption, in the opinion of the bureau, may be attributed to the generally fair weather. The demand of November, 1926, was exceeded by 18 per cent.

Gasoline stocks on hand at the end of the month amounted to 30,401,000 barrels, a gain over the previous month of approximately 850,000 barrels. This is the first month since March that gasoline stocks have gained. It is estimated that at the current rate of total demand, these stocks represent 32 days' supply, as compared with 31 days' supply on hand the previous month, and 44 days' supply on hand a year ago.

The natural gasoline industry establish-

(Continued on page 38)

ANALYSIS OF SUPPLY AND DEMAND OF ALL OILS

(Including wax, coke and asphalt in thousands of barrels of 42 U. S. gallons)

	Oct. 1927	Nov. 1927	Nov. 1926	Jan.-Nov. 1927	Jan.-Nov. 1926
NEW SUPPLY:					
Domestic production:					
Crude Petroleum:					
Light	68,037	65,378	57,720	718,365	573,506
Heavy	9,044	8,400	12,171	101,962	124,743
Total crude	77,081	73,778	69,891	820,327	698,249
Natural-gas gasoline	3,419	3,410	2,967	35,239	29,205
Benzol	217	205	179	2,351	1,936
Total	80,717	77,393	73,037	857,917	729,390
Daily average	2,604	2,580	2,435	2,569	2,184
Excess of daily average domestic production over domestic demand	367	355	253	384	50
Imports:					
Crude	4,633	5,339	5,043	51,947	55,395
Refined	1,041	1,159	1,619	12,597	19,620
Total new supply all oils	86,391	83,891	79,699	922,461	804,405
Daily average	2,787	2,796	2,657	2,762	2,408
Change in stocks all oils	4,048	5,222	921	62,552	*28,318
DEMAND:					
Total demand	82,343	78,669	78,778	859,909	832,723
Daily average	2,656	2,622	2,626	2,575	2,493
Exports†:					
Crude	1,539	1,280	1,344	14,126	14,124
Refined	11,458	10,641	11,964	115,833	105,852
Domestic demand	69,346	66,748	65,470	729,950	712,747
Daily average	2,237	2,225	2,182	2,185	2,134
STOCKS (end of month):					
Crude:					
East California‡:					
Light	297,263	300,475	223,828	300,475	223,828
Heavy	48,094	48,410	53,321	48,410	53,321
California:					
Light	21,609	21,191	30,051	21,191	30,051
Heavy§	91,858	92,555	87,440	92,555	87,440
Total crude	458,824	462,631	394,640	462,631	394,640
Natural-gas gasoline at plants	781	820	462	820	462
Total refined	117,822	119,198	121,441	119,198	121,441
Grand total stocks all oils	577,427	582,649	516,543	582,649	516,543
Bunker oil (included above in domestic demand)	4,594	3,953	3,953	45,629	42,596

*—Decrease.
†—Includes shipments to non-contiguous territories
‡—Exclusive of producers' stocks.
§—Includes fuel oil.

Deep Coastal Producer Flows 1100 Barrels on Test

Texas and Louisiana Gulf Coast have completions in 11 fields during week but combined initial production is small

By JACK LOGAN
Staff Representative

HOUSTON—The deepest producing well in the Gulf Coast, Pure Oil Company's Sweet Lake 3, located in Cameron Parish, Louisiana, proved to be one of the most interesting ones in the region the past week, not only because of its depth, which is 5897 feet, but also by reason of its production. Since production was brought back in the well about the middle of December, it has been flowing at the rate of around 475 barrels a day through a three-eighths-inch choke. Late last week it was allowed to flow through a one-half-inch hole, and the flow increased to 1100 barrels a day, the pressure remaining about 600 pounds.

In this same district Pure Oil Company is drilling ahead in two other tests, the Sweet Lake 4 and the Sweet Lake 5. The No. 4 was drilling early this week at 5495 feet in water sand, and the No. 5 was at 5480 feet in gumbo and lime.

Kelso Bayou

Calcasieu Oil Company's Olevia 1, located in Cameron Parish on the Kelso Bayou dome, which was only recently opened for production, is due to be completed within a short time. It encountered the pay sand at 3975 feet, and casing has been set at 3955 feet.

The same company's Watkins 1, which, like the Olevia 1 is an offset to the Caldwell 2, discovery well, was drilling several days ago at 1630 feet in rock. Calcasieu Oil Company also has a derrick up for another test, the fifth to be started by this company. These tests that are being drilled by the Calcasieu Oil Company, are owned equally by that company, Magnolia Petroleum Company and Union Sulphur Company.

Several New Wildcats

Several new wildcat tests are scheduled to begin drilling in the Gulf Coast section of Texas. At Hawkinsville, Matagorda County, Gulf Production Company has a location for its Sanborn 5. The Sanborn 4 is still drilling.

In Jefferson County Jim McMurry has a rig up for his Crosby 2, about five miles northeast of Port Arthur. His Crosby 1 was abandoned several weeks ago at 3350 feet.

In the South Liberty district of Liberty County The Texas Company is building a derrick for Green 1.

The Rich Oil Corporation will drill a wildcat test on the J. N. Lee land in the G. H. & H. R. R. survey 21 of Wharton County. The location is in the north part of the county, about one-half mile southwest of the town of Lissie, and six miles east of Eagle Lake. It is about 600 yards south of the G. H. & S. A. railroad. In the immediate vicinity of the test which the Rich Oil Corporation will drill, a test was put down early in 1921 by the Lissie Petroleum Company. That test had a strong oil showing in sand rock at 865-870 feet, but was later abandoned at 1115 feet.

Coastal Texas Completions

Although tests were completed in 11 fields and in two wildcat areas of the Gulf Coast region during the past week, the total amount of new oil that was added through those completions was only a little more than 2000 barrels.

In Coastal Texas there were 11 completions, including one wildcat failure, one failure in a proven field, and **nine** producers which had a combined initial production of 1642 barrels.

Blue Ridge furnished the largest well of the week, H. R. Cullen's Blakely 1, the initial flow of which was 800 barrels, the depth of the hole being 3880 feet.

Batson Dome supplied 250 barrels of new oil through the completion of Capitol Oil Company's Hodges 9 as a pumping well at 3900 feet. This is the largest producer completed at Batson in a long time.

Humble Oil & Refining Company completed its Myers Fee 5 at Barbers Hill for an initial yield of 100 barrels, pumping. The well is 3275 feet deep.

All other producers completed in the Texas Gulf Coast during the week were old wells that had been deepened. The Texas company's Hannah Fee 2 at Hull was drilled to 3100 feet and put on the pump, and at that level it began producing 50 barrels of fluid, 23 per cent b. s. and water. In the Orange field Texhoma Oil Company's Chesson 13, which was deepened to 3425 feet, had an initial production of 150 barrels when put on the beam.

Pierce Junction Gas Well

Two wells that were deepened at Pierce Junction were producers at the lower levels. The Sun Company's Fitzsimmons 1 began flowing 45 barrels from 4600 feet, and Rio Bravo Oil Company's Settegast A-7, which had been deepened to 4240 feet began making 60,000,000 cubic feet of gas, together with about 50 barrels of 40 gravity oil, the pressure being 1500 pounds. This Rio Bravo well is in the southern end of the west side of the field, being 600 feet south of the nearest production. It was completed about the middle of December, 1927, at 3734 feet, making about 200 barrels a day, but it quit producing a week later and was deepened.

There were also two completions at Sour Lake. Lake Graham Oil Company's Bashara 16, in that field was deepened to 2110 feet, where it was put on the beam and pumped 70 barrels, with a small amount of b. s. and water. Theis Oil Company's Merchant 5 was a flowing well at 2350 feet, making 140 barrels a day.

At Saratoga the Regna Oil Company temporarily abandoned its Teel 2 at 1550 feet.

The wildcat which was abandoned was located in Montgomery County: Brain et al's Fitch A-1, three miles east of Spring. The depth of the hole was 3700 feet. Several other wildcats have been abandoned in Montgomery County during the past three or four months, and at present there is no activity in the county.

South Louisiana Completions

In South Louisiana there were five completions, including two failures and three producers, the combined initial of the latter being 457 barrels.

In the Lockport field, which has not been very active during the past several months, the Miller 19, drilled by the Vacuum Oil Company, but owned jointly by that Company and Gulf Refining Company, was completed for an initial flow of 250 barrels, including 20 per cent water. The G. W. Farquahar et al's A-5 of the same interests was temporarily abandoned at 5650 feet.

One wildcat was included in the completions of Coastal Louisiana. It was the Southern Gas Company's South Down 3 in Terrebonne Parish, abandoned at 2445 feet.

Peculiar Water Trouble Develops in Hendrick Field

Dozen tests halted by flow of fresh water coming up outside of casing with danger of cratering; abandoned gasser believed cause

By H. H. KING
Staff Representative

SAN ANGELO, TEXAS.—Water troubles from a new source have hit more than a dozen drilling tests and wells within a mile radius of a junked gas well in the Hendrick field, Winkler County, and drilling has been suspended on same to try and kill a heavy flow of fresh water reaching the surface outside the string of casing cemented in the lime horizon. The volume of water escaping around these tests varies from three to 15 thousand barrels daily, and some of the tests are in immediate danger of craters being formed by the washing of soil from the strings of casing. While this problem was occupying the attention of operators in the field proper, the Amerada Petroleum Corporations' wildcat test on the J. B. Walton land, located about two and one-half miles east of production, blew out, making about 50,000,000 cubic feet of dry gas and a large amount of water at 2409 feet, when the crew was engaged in unscrewing pipe to dislodge tools. The derrick was virtually demolished when the tools and a number of joints of pipe were blown from the hole, thus making it difficult to shut in the well promptly.

Republic Production Company's Grisham-Hunter 1-B, which was abandoned last October at 2170 feet with 2000 feet of drill stem lost in the hole after encountering heavy gas production at 2125-70 feet, is believed to be the cause of the widespread encroachment of fresh water. A twin location was spudded about 50 feet north of the junked hole, and the gas broke through when the second test was drilling at 1250 feet and again at 1410 feet. This twin location has been drilled to 2036 feet, with 8¼-inch casing cemented at 1983 feet, having successfully fought off the gas. However, the escaping gas found its way into the upper fresh water sands, which are very porous, and it is through this formation that the escaping gas is driving the water to various parts of the field under heavy pressure, reaching the surface between and around the strings of casing used on wells and drilling tests.

Several hundred tons of clay and mud have been ordered shipped into the field immediately by Republic, to try and eliminate this unusual situation, and some delay is necessary due to the absence of any soil or material suitable for mudding in the gas in this general section of West Texas.

Southern Crude Oil Purchasing Company et al was the hardest hit by the encroachment of surface water, as a half dozen tests on its various leases on the east side of production began flowing from three to 15 thousand barrels of water daily, while Atlantic, Humble, Murchison-Cranfill, Eastland Oil Company, The Texas Company and Gulf had one or more tests to begin making water around the casing. However, Southern was prepared for this trouble to a greater extent than the average company, as about 250 sacks of cement are used in cementing the string of pipe in the lime horizon, and there is very little danger of the water reaching the bottom of the holes. Gulf's Hendrick 8 developed a flow of 10,000 barrels of fresh water last week while drilling at 1641 feet, same escaping to the surface inside the 12½-inch surface pipe set at 347 feet. The water has been shut off by cementing this string to the next string of casing, but it will be impossible to recover the large pipe in this hole when a producing well is completed, as is usually the policy.

Amerada's wildcat gasser undoubtedly establishes a new producing area for Winkler County, as the key formations have not been correlated satisfactorily with those in the Hendrick field proper. A decisive test of this area will probably be made by a southwest offset to the wild gasser within a week or two, as Southern Crude and R. A. Westbrook & Company's Cummings 1 has cemented pipe below 2100 feet, and will drill in as soon as the hazard from the blowing gas well is removed. Amerada's well is located in the southwest corner of the northwest quarter of Section 48, block 26, and about two miles southwest of Kermit. Southern's Hendrick 2-F-T-67, Section 33, is testing out a shallow oil pay credited with making sweet oil from pay at 2197 feet, such being the first sweet oil found in the Hendrick field.

Bottom hole water in the Hendrick field failed to spread during the past week, and some of the previously mentioned wells are now making less water. Magnolia Petroleum Company's Hendrick 2, which was one of the first in the field to show a high percentage of water and b. s. and which contaminated three big wells on offset loca-

HENDRICK FIELD OPERATIONS

The status of operations in the Hendrick field, Winkler County, Texas at the close of last week is shown below by companies:

	Locations & Rigs	Drilling Tests	Tests in Big Lime	Comp. Wells	Initial Prod.	Daily Av. Prod.
Amerada Petroleum Corp.	..	..	1	..	.....	.....
Atlantic Oil Prod. Co.	..	1	5	3	8,460	8,065
Atlantic & J. D. Collett	..	1	..	..	.....	.....
Cranfill-Reynolds	..	1	1	2	11,500	*5,665
Eastland Oil Company	..	..	1	..	.....	.....
Gulf Production Co.	2	2	..	6	16,695	*4,825
Humble Oil & Ref. Co.	..	2	2	3	12,400	*5,205
Independent Oil & Gas Co.	3	5	2	3	8,070	*4,855
Landreth Prod. & Roxana	1	..	2	3	10,800	9,050
Magnolia Petroleum Co.	..	2	2	2	6,000	3,100
Joe Maxell & L. C. Turman	3	1	4	..	.....	*825
Murchison & Cranfill Bros.	3	..	2	4	6,175	985
Republic Production Co.	1	1	1	1	6,000	3,300
Roxana Petroleum Corp.	1	6	4	1	10,000	*3,160
Sheldon & Burden	..	..	1	..	.....	.....
Southern Crude & Westbrook	5	1	9	5	9,350	8,420
Southern & Dixie Oil Co.	1	3	7	6	7,260	*4,665
The Texas Company	..	4	5	1	5,000	*700
Texon Oil & Land Co.	..	..	4	1	4,100	*1,295
Totals	20	30	53	41	121,810	64,115
Totals previous week	18	31	50	39	118,350	55,760

*Production partially pinched.

tions, is to be plugged back. A string of 5-3/16-inch casing with packer is being run in Magnolia's Hendrick 2 to make certain of a perfect water shut-off from the upper horizons, as there is still some belief that water has been forced into this well through a faulty casing seat, or leaky casing, although it jumped from 50 to 90 per cent water when deepened six feet. Gulf's Hendrick 1 is still making a high percentage of cut oil, although a west offset held by Southern remains free from water troubles even though considerably lower on structure and actual depth. Gulf may set another string of pipe in this well and drill deeper for a second break in the pay, according to reports.

Field storage and tank car shipments continue to serve as the only outlet for the crude produced in the Hendrick field, and during December the combined tank car shipments made by Roxana, Southern and American Petroleum Company amounted to about 668,000 barrels.

Two Completions

Two producers were added to the Hendrick field early this week by the Roxana Petroleum Corporation, including a 10,000-barrel well on the north end of the field.

Roxana's Grisham-Hunter 1-A is credited with having made the above big flow of pipe line oil after being deepened to 2880 feet, although it has been showing for a 1500-barrel producer for several weeks in pay at 2800 to 2828 feet.

It is a north offset to Republic's first producer, which registered an initial of 6000 barrels daily.

Roxana's Hendrick 2-C blew in Monday, making 320 barrels of fluid per hour from regular pay at 2989 feet, with about one-fourth cut oil. The flow was pinched to about 1500 barrels daily, thus reducing the volume of cut oil to about five per cent. This well is a south offset to Roxana's Hendrick 1-C, which set a record by flowing 980 barrels of pipe line oil during one hour when completed.

Fisher County Wildcat Shows High Gravity

Fort Worth, Texas.—The first wildcat oil strike in West Texas since the arrival of the new year was made last week when The Texas Company's Dan W. Stephens 1-A developed a hole full of high gravity oil after drilling two feet in lime pay to a total depth of 3240 feet. This discovery was made in the northeastern part of Fisher County near Royston, and is the first oil production of any consequence produced in the county, while the nearest oil field is the Noodle Creek semi-shallow area, located about 25 miles to the southeast in Jones County.

Very little gas is showing with the 38 degree gravity oil production in the Dan Stephens discovery well, but several light heads of oil were made late last week when the bailer was run, indicating a commercial pumper as it now stands. This wildcat producer is located in the southeast corner of Section 79, block 1, H&TC Ry. survey, and about 60 feet east of a 2302-foot junked hole registered by The Texas Company last October in making the first try for production on this wildcat drilling block. The discovery well encountered the top of the lime at 3190 feet, with a surface elevation of 1937 feet, and apparently is producing from a formation somewhat similar to that now furnishing steady pumpers in Jones, Mitchell and Scurry Counties. A small amount of water is showing with the oil production in The Texas Company's discovery well, since an open hole extends for 77 feet, with six-inch pipe set at 3163 feet. A string of 5-3/16-inch casing with a perforated joint is being run this week to drill deeper.

A block of about 5000 acres is held in close vicinity to the Fisher County producer by The Texas Company, and other nearby lease owners, includes: Mid-West Exploration Company, J. B. Dunnigan, Homer Peoples, Sinclair, Humble and Mid-Continent Petroleum Corporation. The Texas Company was reported to be buying more leases shortly after encountering the oil production.

Rio Bravo Celebrates Big Year With Dinner

Houston—Employes in the general office of the Rio Bravo Oil Company celebrated the close of the company's record business year and the beginning of the second year's service of their vice president and general manager, James Hutcheson, with a dinner at San Jacinto Inn on the evening of January 6. Mr. Hutcheson became associated with this company on January 1, 1927, having resigned as superintendent of the Texas division of the Associated Oil Company to accept his present position.

Under his management in 1927, the Rio Bravo Oil Company had the largest volume of business in its history, the production for the year amounting to approximately 3,431,000 barrels, with no flush production or new fields affecting the figure. The company's production in 1926, which included flush oil from Spindle Top, was approximately 3,083,000 barrels. Although the production now is less than it was a year ago, much credit is due Mr. Hutcheson for the continued profitable recovery from territory that is already greatly exhausted.

The program of the social meeting at San Jacinto Inn included dancing in addition to the dinner. The following were present: Mr. and Mrs. Hutcheson, Mr. and Mrs. C. H. Homer, Mr. and Mrs. R. W. Shaw, Mr. and Mrs. M. C. McDowell, Mr. and Mrs. S. T. Childress, Mr. and Mrs. U. V. Seales, Mr. and Mrs. J. E. Bedell, Mr. and Mrs. I. B. Neville, Mr. and Mrs. O. M. Longnecker, Jr., Mr. and Mrs. J. W. Redford, Mr. and Mrs. L. E. Greene, Mr. and Mrs. M. F. Harrington, Mr. and Mrs. C. V. Hartman, Mr. and Mrs. J. T. Griffin, Misses Edith Dailey, Mac Read Dowlen, Laverne Hebert, Viola Sanders, O. W. Covington, Marguerite McSweeney, Geraldine Tate, Martha McDonald, Grace Newman, Frances McKnight, Edna Mae Newman, and Messrs. M. E. Schwarz, M. E. Shelton, H. D. Howard, Jr., Joe Zaba, T. B. Buhler, C. R. Dennis, Geo. Willis, W. T. Smith, R. G. Williams, J. M. Vetter, John Kirschke, T. P. Fenelon and W. H. Sanders, Jr.

Two Locations at Dale

Houston—The Texas Company has made locations for two new tests in the Dale Field, Caldwell County. The Lackey 6 will be a direct offset to The Texas Company's Osteen 1, and the Moore 1 will be a direct offset to The Texas Company's Lackey 5.

This company has 11 producing wells in the field, the average daily production from them being about 350 barrels. There are only about 15 producers in the field, and the production of all companies is about 400 barrels a day.

Bureau Figures Reveal Production Decrease in November

(Continued from page 35)

ed a new high output mark in November when the yield was 143,000,000 gallons. Although this total is 400,000 gallons below that of October, it represents a gain over the latter of 140,000 gallons daily average. The output of November, 1927, was also 15 per cent greater than that of November, 1926.

Of the total production, 115,900,000 gallons, or 81 per cent, was reported as having been blended at refineries, 8,600,000 gallons, or 6 per cent, was turned into pipe lines in California, 3,500,000 gallons was blended at the natural gasoline plants or sold by them to jobbers, 1,600,000 gallons was added to stocks, leaving 13,600,000 gallons, or 9 per cent for losses and quantities not accounted for.

Stocks of natural gasoline at the plants, November 30, amounted to 34,440,000 gallons, a moderate increase over the previous month.

Production of natural gasoline by sections for November was as follows: The Appalachian section, 8,300,000 gallons; Indiana, Illinois, and other Central States, 1,400,000 gallons; Oklahoma, Kansas, 53,700,000 gallons; Texas, 27,500,000 gallons; Louisiana and Arkansas, 6,700,000 gallons; Rocky Mountain district, 3,900,000 gallons; and California, 41,700,000 gallons.

Little change was recorded for the minor refined products, except in the indicated domestic demand for kerosene and wax, both of which showed material decreases.

Refinery data reported by the bureau was compiled from schedules of 322 refineries, with an aggregate daily crude oil capacity of 2,871,000 barrels. These plants operated at 81 per cent of their recorded capacity. During October, 329 plants were reported as operating at 80 per cent of their capacity.

Corrugated Pipe Jackets Protect Gas Line From Shocks

Installation under highways and railroads economically accomplished with soil augers used on Houston pipe line

By F. W. KIRK,
General Superintendent Houston Oil Company, Houston Pipe Line Company

UNTIL a short time ago, the city of Houston was without a supply of natural gas for industrial purposes, and the completion of a 12-inch, high-pressure gas main into the city was a happy occasion.

When the average person looks upon a pipe line of this sort, little does he realize the "grief" connected with its construction and maintenance.

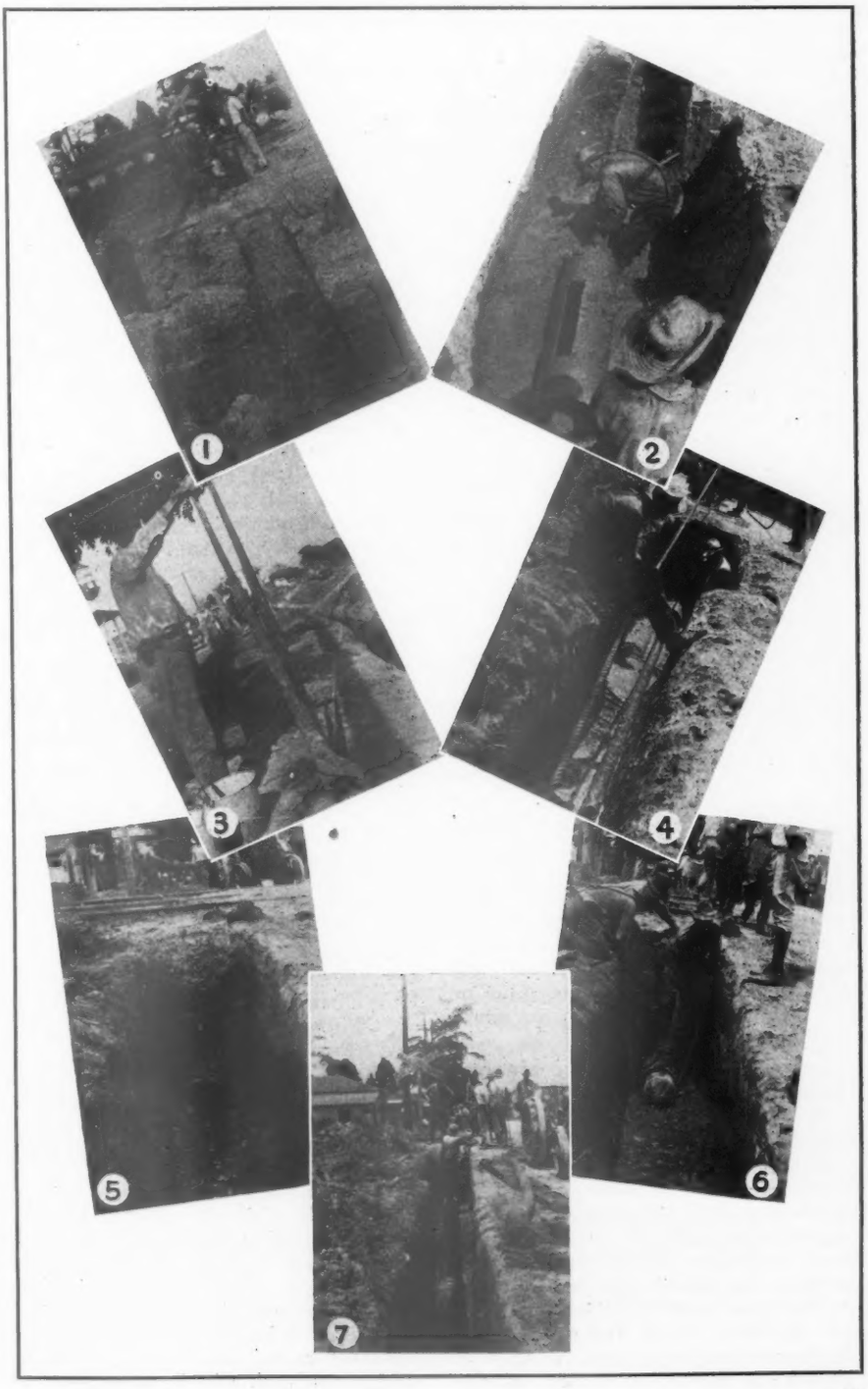
An obstacle that caused at one time a great deal of consternation on the part of oil companies, gas companies, power and telephone companies, highway commissions and railroads, is no longer to be feared. In the laying of pipe lines there is the question of rights-of-way, and under this heading comes the securing of permits by parties laying lines of any sort under highways and railroads. When mention is made of excavating directly across highways or railroads, the officials in charge immediately assume a defensive attitude, for this means a more or less serious interference with operation; but when the alternative method of jacking or boring the pipes underneath their rights-of-way is proposed, their attitude changes, for that means no interference with traffic. Slow orders are unnecessary and there is little or nothing to worry about.

In laying the 12-inch, high-pressure main into Houston, it was necessary to run the line underneath the tracks of the Houston Belt & Terminal Railway and the main-line used by all north and east bound trains of the Missouri Pacific and the T. & V. V. Railroads. See Fig. 1. The spur may be seen in the foreground. In the background, preparations are being made to place an Armco corrugated pipe underneath the tracks through which the gas main will pass.

Since the gas main itself is unable to support traffic and retain its gas-tightness, it is necessary when passing it underneath rights-of-way of any sort to protect it from traffic shocks and strains. Corrugated pipe, so commonly used as culverts, has proven the ideal jacket for oil and gas mains in our experience, as it is sufficiently strong to carry the traffic load and absorbs vibrations that would tend to cause leaks in pipe lines. When made from pure iron and well galvanized, it should have a satisfactory service life.

As it was not desired to interfere with the railroad traffic, and as it is always necessary to be as economical as is consistent with the best results, the boring method herein described was resorted to in all cases where the line went underneath railroads and highways.

Mention might be made here of the necessity of first examining the soil



through which corrugated pipes are to be placed by this method for the reason that the material must be self-sustaining. A sandy loam would tend to cave in as excavations were made, either resulting in binding of the pipe or allowing no progress forward on account of filling immediately upon pulling out the auger.

Armco corrugated pipe, 15 inches in diameter and of 14 gauge metal, was used in the above instance. The following method of excavation was used:

The Auger

As acetylene torches were on the job for welding the pipe joints, this equipment was used for making a soil auger. The auger used in this case (see Fig. 2) consisted of a piece of the pipe, to which was attached a long shaft. The boring portion of the tool was six feet long and 16 inches in diameter. The cutting edge was equipped with a gouging strip welded in place by a torch. Attached to this drilling portion was a four-inch shaft, 30 feet long. This boring tool was made right on the job, with small expense of time or materials, and it proved quite efficient. However, it is probable that a designer with machine shop facilities could produce one which would be superior.

The approach trench consisted of the regular trench into which the gas pipe was being laid. The excavation underneath the tracks was started with a shovel. When it became impossible to dig further in this way, the auger was inserted into the hole and boring started. Nine men turned the shaft of the auger by means of large pipe tongs (see Fig. 3), three men to a set of tongs. At the rear end of the auger, three men were employed in forcing the auger forward by the aid of a lever, consisting of a piece of timber braced against a plank, laid in the bottom of the trench with strips nailed across its width every four or five inches.

To facilitate boring, water was thrown into the boring tool and also into the hole beneath the tracks. As the tool became filled, it was hauled out and emptied. Figure 4 shows the method of placing it back into the hole. The rope was tied to the farther end and the drill pulled into position. One or two men were able to keep the auger in alignment.

Figure 5 shows the Armco pipe underneath the tracks. Preparations are being made to thread the gas main through the corrugated pipe.

A "nose" or bull plug is spot-welded to the near end of the gas main to facilitate pushing it through the corrugated pipe and also to keep dirt from entering. When through the opening, the nose is removed by torch and the pipe joint made by the welders. Figure 6 shows the nose of the pipe emanating from the culvert.

Figure 7 shows a portion of the high-pressure gas main as installed by the Houston Pipe Line Company, nearly ready to be covered over.

A check was made of the costs connected with this method of passing pipe lines underneath railroads and highways, and it was determined that a saving of approximately 50 per cent was made on this job as compared with the open trench method. No doubt this saving could be increased where a large number of installations have to be made by applying power from a gas engine or from a tractor to drive the shaft instead of revolving it by means of hand tools as we did in these instances. In addition to the saving on installation costs, we believe the corrugated pipe insures absolute protection of the pipe line from the shocks and jars of the heavy traffic which would no doubt result, in time, in considerable leakage.

New A. P. I. Committee Gets Into Action

New York.—At the Chicago meeting of the American Petroleum Institute, held early in December, it was decided to reduce the committee on accounting to 11 members, five to be selected regionally, and six elected at large. Purpose of this arrangement is to facilitate the future work of the committee.

The five members selected regionally will serve as chairmen of sub-committees selected from companies and individuals in the region from which they are appointed, the sub-committees to have meetings during the current year and thereafter to pass upon the detailed schedules of revenue and expense accounts and fixed asset accounts, and to consider any other accounting matters.

Personnel of the new committee is as follows: Eastern region, H. F. Davis, Standard Oil Company of New Jersey, New York; Appalachian region, F. S. Reitzel, The Sun Oil Company, Philadelphia; Mid-Continent region, George F. Winters, Phillips Petroleum Company, Bartlesville; Texas-Louisiana region, Ira McFarland, The Texas Company, Houston; California region, George H. Forster, Union Oil Company of California, Los Angeles.

Members at large include H. A. Gidney, Gulf Oil Corporation, Pittsburgh; B. W. Letcher, Standard Oil Company of California, San Francisco; C. H. Jay, Pure Oil Company, Chicago; George F. Smith, Continental Oil Company, Denver; Paul R. Jones, H. L. Doherty and Company, New York, and M. W. Mattison, American Petroleum Institute, New York.

The first meeting of the committee was held in Chicago, and the permanent organization effected. M. W. Mattison is chairman and J. A. McNally is secretary.

The new committee is to function as a clearing house for all accounting problems submitted. Such problems, when submitted, will be circulated to the different members of the committee, and thereafter a ruling will be made on each question submitted.

It is intended that group sessions in the various regions enumerated will begin in May and that at least one group session will be held in each of the regions during the current year.

There are to be two meetings of the general committee, the date and place to be announced later.

Name Officers for Osage Lessees Association

Tulsa—R. F. MacArthur, a vice-president of the Barnsdall Oil Company, has been named to again serve as president of the Osage Oil & Gas Lessees Association. Other officers re-elected at the meeting of the association held January 4 in the association headquarters, 505 Cosden Building, Tulsa, are H. R. Straight, president of the Empire Oil & Gas Company, Bartlesville, vice-president; W. C. Franklin, Tidal Companies, Tulsa, treasurer, and Harry H. Smith, secretary.

Making up the executive committee of the association for 1928 are the following men: G. D. Allen, Winona Oil Company, Tulsa; R. J. Berry, Mid-Kansas Oil and Gas Company, Tulsa; Burdette Blue, Indian Territory Illuminating Oil Company, Bartlesville; Burt H. Collins, Echo Oil Company, Tulsa; Fred Cook, Prairie Oil and Gas Company, Tulsa; William N. Davis, Phillips Petroleum Company, Bartlesville; J. C. Denton, Mid-Continent Petroleum Corporation, Tulsa; James B. Diggs, Gypsy Oil Company, Tulsa; George B. Foster, Devonian Oil Company, Tulsa; W. C. Franklin, Tidal Oil Company, Tulsa; J. H. Gardner, Gardner Petroleum Company, Tulsa; Arthur Durham, Wiser Oil Company, Bartlesville; James A. Green, Roxana Petroleum Corporation, Tulsa; J. H. Hill, The Texas Company, Tulsa; R. F. MacArthur, Barnsdall Oil Company, Tulsa; E. W. Marland, Marland Oil Company, Ponca City; R. S. McFarland, Twin State Oil Company, Tulsa; George Parker, Lewis Oil Company, Tulsa; A. G. Oliphant, Tulsa; Charles B. Peters, Peters Petroleum Company, Tulsa; R. A. Griffith, Sinclair Companies, Tulsa; Frank Phillips, Phillips Petroleum Company, Bartlesville; Alvin Richards, Pure Oil Company, Tulsa; R. C. Sharp, Oklahoma Natural Gas Corporation, Tulsa; W. G. Skelly, Skelly Oil Company, Tulsa; J. B. Steele, Kewanee Oil and Gas Company, Tulsa; H. R. Straight, Empire Companies, Bartlesville; James A. Veasey, Carter Oil Company, Tulsa; R. E. Wertz, Producers and Refiners Corporation, Tulsa.

Prairie Shipments

Independence, Kansas.—Prairie Pipe Line Company's shipments during December totaled 5,344,811 barrels. This crude movement registers an increase of 188,515 barrels over that of two months ago.

Sand Production Makes Serious Problem at Coalinga

Heavy oil and nature of the sand formation defies usual practice of control with screen, and mountains of sand result

By BRAD MILLS
Staff Representative

THE Coalinga oil field in California is an excellent example of the successful development and operation of areas producing large quantities of sand with the oil. The field, which is a combination of two monoclines and an anticline, has produced mountains of sand over a period of nearly 40 years.

Soon after the discovery of the field in 1890, it was found, under conditions existing at that time, that more oil could be obtained by producing large quantities of sand. The portion of the field producing the heaviest crude was first developed; and it was only natural that the heavy oil required the production of more sand than the lighter crude found in the deeper sections lying to the east.

Wells in the Coalinga field vary from 400 to 4400 feet in depth, and the gravity of the oil ranges from eight to 42. The west side of the field has produced the bulk of the heavy oil, and was extensively developed before deeper drilling disclosed a lighter crude, which has been produced with a minimum quantity of sand.

Early Trouble

During the early history of the field, only crude efforts were made to shut out the sand. Experiments of all sorts proved that the heavy oil could be produced effectively with a high percentage of sand. Some operators contended that the greatest amount of sand could not fail to produce the maximum quantity of oil. Some made efforts to keep the bulk of the sand out, but all produced appreciable quantities. It was not uncommon to produce a mixture containing 80 per cent sand. It is safe to say that many of the best producers yielded as much sand as oil.

As production gradually crept toward the east and the oil became lighter in that section, the operators began an earnest search for equipment that would produce more oil and less sand. It was still believed by many, however, that a radical reduction in the amount of sand would also reduce the quantity of oil. The Heavy oil had been a serious problem and a screen effective in shutting out the sand had been equally as effective in holding back the oil.

During the early history of the Coalinga field, the gas pressure was exceedingly high for an area producing such heavy oil. Much trouble resulted from a combination of excessive gas and sand. It was a difficult situation at its best and the production of heavy oil under such circumstances called for both ingenuity and economy. Fittings often had to be replaced in rapid order and the surplus gas was always only too ready to encroach when not wanted.

The early method employed, and the one used today in many parts of the field, was to allow the wells to flow or pump into an earthen pit. In due time the sand settled and the oil was pumped to tanks. The cost of handling the oil sand was very high. Nearly every well was surrounded by a huge ridge of sand.

A more up-to-date method is now employed where the sand is not produced in large quantities. Neat wooden and tin troughs and improvised tanks are elevated and an outlet provided near the top. The pumper disposes of the sand at frequent intervals and the well functions with regularity. Due to a rather brittle and porous sand condition, all wells are bothered to some extent.

Many of the old wells are producing only a few barrels daily. Clusters of wells are sometimes pumped from one central power plant. The utmost economy is necessary to produce many of the old leases at a profit. The field is so nearly exhausted in spots that only a very small stream comes from the flow line.

Much Discussed

The action of the sand has been the subject of much discussion. There is a difference of opinion as to whether large craters are formed underground or a large number of small pockets exist. In attempting to repair wells, it has been found that the bottom of the hole will take enormous quantities of mud and cement with no apparent effect. Circulation is often entirely lost. The oil string is sometimes shifted to find a more stable point of production.

Early producing methods generally called for large round perforations in the bottom of the oil string. The perforations varied in size, depending upon the gravity of the oil and the quantity of sand the operator thought best to produce. Some criticism has resulted from the practice, but a fairly satisfactory production was obtained. Production undoubtedly would have been smaller had a modern screen been used. If a similar condition existed in a new field today, operators might have to resort to the same production methods. The sand condition was taken as a matter of course and it was produced just as wells might now be produced with a large percentage of water present.

Like other old fields in California, Coalinga was developed largely with cable tools. Sand conditions have made it necessary to use cable tools when completing wells, even today. Rotary equipment is now drilling the deep wells in the eastern part of the field, but it is not effective while drilling in the oil sand. It has been found that rotary methods mud and seal up the nearly-depleted sand and the well is often permanently injured. The practice of re-drilling with oil has also been successful in the field.

Operators Study Conditions

Efforts have been made to shut in wells in the field during periods of over-production. The practice gave the operators a chance to study the effect of the shut-in on sand conditions. Upon re-opening the wells it was found that many produced an increased amount of sand and were kept on production with difficulty. It was found that in nearly every case where the wells produced a greater quantity of oil, they produced a much larger body of sand. The rather porous sand is also very susceptible to water. Ground water encroaches easily, and water used in drilling also enters the sand readily.

The Coalinga field is not the only one in Cailfornia producing enormous quantities of sand, but it probably has had more problems to overcome than other fields in the same category. The wells producing the largest amounts of sand have fortunately been shallow. Otherwise, their operation would have been an economic impossibility. Peak production was reached in 1912, when 19,546,000 barrels were produced from less than 1000 wells. The field now has a daily production of 19,000 barrels from 975 wells.

The newer sections of the field are now producing in much the same manner as fields in other sections of the state. The oil is fairly light and screen pipe is used effectively. Every effort is made to hold back the sand, which is regarded as a nuisance, rather than a necessity.

PERSONAL MENTION-MEN YOU KNOW

Russell Suppes, 31-year-old mechanic-engineer in the El Dorado, Kansas, field, was killed January 3 when his clothing caught in machinery and he was pulled into a well shaft while working in a pump-house. His body was moved to Tulsa for burial. Surviving him are his wife and two children of El Dorado; his mother, Mrs. Emma Suppes of Tulsa; two brothers, Raymond of Tulsa and Roy of Okemah, and a cousin, Miss Sophia Suppes, oil editor of the Tulsa Tribune.

Charles L. Sherwood, scout in the El Dorado, Kansas, territory for Mid-Continent Petroleum Corporation, returned to his headquarters last week after spending several days late in December in Tulsa, accompanied by his wife.

Harry Norris, chief scout for Prairie Oil & Gas Company, Tulsa, was confined to his home several days last week, overcoming an attack of influenza.

M. B. Johnson of the Kewanee Oil & Gas Company, Tulsa, returned home last week from a trip to Philadelphia, where he spent the Christmas holidays.

Van Cortright Mekeel, formerly connected with Taylor-Wharton Iron and Steel Company, High Bridge, New Jersey, has accepted a post as special representative of the Nugent Steel Castings Company, Chicago. He was special research investigator, mechanical engineer and sales engineer with the Taylor-Wharton concern.

Henry L. Phillips, president of the Sinclair Crude Oil Purchasing Company, and Miss Ethel W. Burns, both of Tulsa, were married December 23, in Sistersville, West Virginia, the home of the bride's sister, Mrs. H. W. McCoy. Immediately following the marriage the couple left by automobile for Chicago, and drove from there into Tulsa for the Christmas holidays. Mr. Phillips, well known in the oil industry, and a long-time executive of the Sinclair in the Mid-Continent, lives at 1308 South Baltimore Avenue, Tulsa. Mrs. Phillips is the daughter of Mr. and Mrs. William H. Burns, 1715 South Madison Avenue.

W. G. Ross, formerly manager for the International Supply Company at Artesia, New Mexico, is now representing the Wickwire Spencer Steel Company in the Eastern oil fields. Mr. Ross will handle wire rope sales and make his headquarters at Butler, Pennsylvania.

W. N. Davis Again Heads Oil and Gas Association

Tulsa—William N. Davis, vice-president of the Phillips Petroleum Company, Bartlesville, is to serve the Mid-Continent Oil & Gas Association again as president, having been re-elected to this position at the annual meeting held in Tulsa January 4. His re-election makes him head of this body for the sixth year.

Equal territorial representation for the organization is seen in the naming of three vice-presidents. W. H. Francis of the Magnolia Petroleum Company, Dallas, was elected first vice-president; C. C. Herndon, executive vice-president of Skelly Oil Company, Tulsa, will serve second in this position, while M. J. Grogan, president of the Louisiana Oil Refining Corporation, Shreveport, is third vice-president.

The office of chief counsel and secretary-treasurer of the association, will again be held by Harry H. Smith of Tulsa.

Plans for going ahead with the 1928 program has been outlined by the association, a schedule that bids to surpass that of any year past.

San Angelo Convention Program Arranged

San Angelo, Texas—A well balanced business program, including several addresses by recognized authorities, has been arranged for the third annual West Texas Petroleum Convention, which will be held here Thursday and Friday, January 26 and 27, and every one identified with the petroleum industry in the Southwest is invited to attend.

The convention is sponsored by the oil division of the local board of city development, which announces that there will be ample accommodations for all visitors, owing to San Angelo's increased hotel, cafe and other facilities. The St. Angelus Hotel will be convention headquarters.

One of the features of the social program that has been arranged will be a banquet at which buffalo meat will be served. At the convention last January bear and quail brought from Mexico were barbecued for the occasion.

On January 25, the day preceding this convention, there will be a meeting of the Oil and Gas Bureau of the West Texas Chamber of Commerce. H. J. Adair, manager of the bureau, arrived here Saturday from Wichita Falls and established headquarters at the office of the board of city development. The meetings of the Oil and Gas Bureau and the Petroleum Convention are independent of each other, however.

Gilbert Wood, who for the past 18 months has been in charge of Independent Oil & Gas Company's Kansas division, has been transferred to Texas in the same position, effective January 1, and will make his headquarters at Fort Worth. G. H. Collinwood of the Philmac Company will now have charge of the Kansas division's land department, and M. C. Quiston of the Philmac will be in charge of production there.

D. S. Vincent, head of the exploration department for Utah Oil Refining Company of Salt Lake City, visited in Casper for a time this week while in the city attending business affairs.

Dr. Victor C. Alderson, formerly president of Colorado School of Mines at Golden, has established his permanent residence and headquarters in La Jolla, near San Diego, California. Dr. Alderson is considered to be one of the world's leading authorities on shale oil.

D. W. Sellery, land agent for the Ohio Oil Company in the Rocky Mountain district, has been transferred from Casper and Artesia headquarters, to those of the company in Los Angeles.

Paul T. Seashore is now superintendent of production for the Louisiana Land & Exploration Company, offices of which are in the Esperson Building, Houston. In this capacity he is in charge of the company's drilling operations in Louisiana. Mr. Seashore was formerly assistant superintendent for the Humphreys Corporation at Houston.

James Hutcheson, vice-president and general manager of the Rio Bravo Oil Company, Houston, was in Luling and San Antonio last week.

C. R. McCollum, geologist with the Union Oil Company of California, has resigned to go with the Prairie Oil & Gas Company, opening a California branch for this company at 452-453 Roosevelt Building, Los Angeles. W. H. Taylor, attorney of Casper, Wyoming, is to be associated with Mr. McCollum in the California office. This action represents the Prairie's initial entry into California fields.

California Production Increase Not Materializing

Output of two threatening areas has not developed as fast as expected and total is little above two months ago

By BRAD MILLS
Staff Representative

LOS ANGELES.—The great flood of crude which was due to strike California soon after the first of the year has not arrived. The expected rate of increase has been much smaller in the two dangerous areas than anticipated, allowing production to rest at a figure little higher than that of two months ago. It seems that such a condition cannot exist much longer, although many well-posted oil men do not believe that the peak production of the year will be much higher than that of last year. With several dozen wells nearing the most prolific level in the Long Beach field, and a dozen wells nearing the sand in the Rincon field, a production of 625,000 barrels seems far too low for the first of March. The absence of a heavy increase has done much to give the oil market a better tone. Much of the optimism is based on a superficial knowledge of the situation, however. Production is bound to increase during the early spring months, regardless of whether the peak falls far below the mark set for it.

The Long Beach field continues a puzzle. Completions have been effected at a very slow rate, and suspense has given way to doubt in some circles. When the big drilling campaign was started in the field, early reports stated that a good idea of the peak production should be gained by the middle of January. Developments have been slow and rather uncertain, leaving the impression among some that the deep sand will not eventually prove as prolific as originally thought. Some wells have been unusually good and some very small, but on the average, the completions have been very satisfactory. At least a dozen wells are nearing completion and another 30 days probably will change the complexion of the situation a great deal. Many wells are offsetting some of the best deep sand producers, and there is no reason why they should not be completed as large wells. Speculation is rife as to the outcome, but only the drill will tell the story. Estimates of all sorts have been made as to the peak production, but so many elements enter into the situation that definite predictions are dangerous.

Long Beach Completions

The Richfield Oil Company's Haas 14 was the only worthwhile completion of the week. The well was completed at 6160 feet with an initial production of 3200 barrels. The new producer is favorably located and adds considerable weight to the contention that the sand in the main part of the field is far from depleted. Richfield's Haas lease has already produced more than 500,000 barrels of oil per acre and probably will produce twice as much before its usefulness is over. It is one of the outstanding leases in the entire field.

The Union Oil Company did not score such an outstanding hit in the completion of its L. B. C. 13, which was a 300-barrel producer at 6035 feet. The oil is only 28 gravity, indicating that the well may clean up and increase its production as well as show a good increase in the gravity of the oil.

The entry of the Standard Oil Company into the Rincon field has added considerable zest to the free-for-all race now going on in the area. The Standard succeeded in obtaining a lease on the Southern Pacific right-of-way, and immediately started action by locating a well just north of the Pan-American's Fee 3, which is the only consistent producer in the field. The right-of-way is 100 feet wide and will accommodate about six wells. The strip runs through the heart of the field, parallel to the beach, and is one of the most valuable leases in the entire area.

Another month should throw additional light on what may be expected of the field. The discovery well has never produced satisfactorily, although it flowed long enough to prove the commercial value of the field. The Pan-American's second producer, Hobson Fee 3, was officially rated as a 900-barrel producer, but it was allowed to flow from the top of the sand only. Developments so far clearly indicate that the first sand will present a series of water problems. The Chanslor-Canfield Midway's Hobson wells, far from the top of the structure, proved several months ago that another sand may be found under the one later found at 2700 feet in the discovery well. With the first sand producing oil and another in prospect around 4000 feet, the field may cut a much larger figure in California oil circles than is generally thought. If the upper sand does not prove dependable, the lower layers undoubtedly will be explored during the year. Several wells are now drilling in the oil sand and should be completed within a few weeks.

Edison District

The general Petroleum Corporation has not abandoned the idea of making a commercial well of Kerwin 1, in the Edison district, and is again placing the well on the pump after an unsatisfactory test. The well pumped for four hours at the rate of 250 barrels, but sanded up. The fluid was 42 per cent water and eight per cent mud. The well was originally drilled to 4006 feet, having penetrated more than 200 feet of promising sand. The hole was plugged back to 3805 feet for another test. It is possible that the latter part of the sand was shut off by the move.

J. A. Brower, independent wildcatter, has encountered a promising oil sand in his test southeast of the Huntington Beach field. The well was drilled to 5357 feet and the 6¼-inch casing cemented at 5225 feet. The well blew out while the drill pipe was being pulled and spouted water and a little oil for some time. Reports that the well was a commercial producer and had opened up a new field were premature. The well is swabbing salt water and a small quantity of oil.

Richfield

The Continental Oil Company has completed Pyne 6, in the Richfield field, with an initial production of 350 barrels. The completion was effected in the deep sand at 4600 feet. The well was considerably smaller than many completed in the field by the company, but is producing at a very consistent rate. The crude is 23.5 gravity and cuts about six per cent. The Continental entered California in a very modest way and acquired leases in the extreme western edge of the Richfield field. Several large wells were completed in a deep sand which had not been tested in that part of the field. The leases became very valuable and a large production was soon developed.

The East Coyote, West Coyote and Olinda fields, which lie along the eastern edge of the Los Angeles basin, are very quiet, with few important tests under way. The Shell Company is making a persistent effort to develop something worth while in the very deep zones in the Brea-Olinda district,

but mechanical trouble has developed. The company's Columbia 40 was drilled to 7115 feet but has made little headway during the past few weeks. The drill pipe was shot at 7035 feet but could not be pulled from the hole. The Olinda district has been the center of very deep operations, but has not yielded more than fair showings below the regular producing formations.

Regardless of the action of the Alamitos Heights area of the Seal Beach field, the conservatively drilled tracts seemed destined to hold their own for months to come. The Associated Oil Company has completed its Bryant 10 with an initial production of 1300 barrels. The well is located some distance from the townlot sector and on a conservatively drilled tract. Total depth was 5005 feet. The rather steady production from the townlot are is accounted for by the action of a small percentage of the producers. While the decline is slow in many wells, the burden is being carried by about one-fourth of the producers. Very few wells are producing more than 1000 barrels, although several are above the 500-barrel mark. The deepening campaign has lost its momentum, having given way to a concerted effort to produce the present wells at capacity. The operators have not recovered from the big decline of three months ago, and are not particularly anxious to complete wells originally intended for the Wasem sand. It is believed that further efforts will be made to test the possibilities of a sand lying near the 6000-foot level.

The Associated Oil Company has completed Lloyd 50 in the Ventura field, with an initial production of 925 barrels of oil and 9,000,000 cubic feet of gas. Such a gas-oil ratio is unusual, even in this field, and shows conclusively that the surplus gas presents a real problem, if it is to be saved. The chief operating companies recently reduced oil runs to lower the gas waste.

Goleta

Another disastrous chapter has been written in the history of the Goleta field. The Santa Barbara Oil Company's Hollister 2A, the only outstanding producer ever completed in the field, has stopped producing after a very creditable record. The well suddenly showed signs of faltering, and stopped producing altogether after a few days. Every effort is being made to again place the well on production. The Goleta field attracted wide attention early in 1927, and predictions were freely made that the next upset in California would be from a light oil area. It was soon discovered that layers of water sand paralleled the main oil-bearing formation, and few satisfactory completions were recorded. Production has never been more than a negligible factor.

The General Petroleum Corporation completed three average wells in the Kern Front field during the week. They were Westmore 7, Section 14-28-27; Sill 30, Section 26-28-27, and Sill 36, Section 26-28-27. Westmore 7 was completed at 2040 feet with an initial production of 210 barrels; Sill 30 was a 175-barrel producer at 2220 feet, and Sill 36 was completed at 2165 feet with an initial production of 150 barrels. The Associated Oil Company, a late entry into the field, completed No. 35, Section 23-28-27, with a production of 175 barrels. Although a large number of wells have been completed in the field, new wells have been started in rapid order. More than 20 wells are now drilling, and several new locations have been made. The development of the field has been rather rapid, but was not accomplished through intense rivalry.

With the announcement that the Midway Northern Oil Company has suspended operations on Section 25-25-18, the Devil's Den area has temporarily passed from the limelight. Reports two months ago stated that the well had opened up a new field and was producing at the rate of 200 barrels, but they proved to have been greatly exaggerated. The well did produce some oil, but considerable water accompanied it. Three other wells are shut down near the Midway Northern's test.

Some idea of the production trend of the Round Mountain field should be gained by observing the outcome of the Honolulu Consolidated Oil Company's tests on Sections 18 and 20-28-29. Some of the company's wells are located nearly a mile northwest of the discovery well. If these are unsuccessful, the main part of the field should lie east of the first producer. The Little & Bell well, which was abandoned, eliminated the region southwest of the proven lease, while the failure of the St. Helens Petroleum Company's wildcat west and slightly north of the Elbe producer placed a ban on further development in that region. The Shell Company is struggling to make some sort of producer of Elbe 6, Section 20-28-29, which was plugged back from 3760 feet to test what should have been the producing sand just below 2000 feet. A cement plug was set and the hole cleaned out to the bottom of the plug, but with no definite results. The well originally produced a small quantity of oil at 2100 feet, but the water problem was never solved. The location is less than a half mile south of the discovery well. The Associated Oil Company has suspended operations on Harvey 1, Section 34-28-29, but will not abandon the test at the present depth of 2565 feet. The well is located more than three miles southeast of the Elbe discovery well.

Rumors that the Texas Corporation, holding company for The Texas Company, and the California Petroleum Corporation were working toward a merger, were confirmed by officials of the California Petroleum Corporation, who stated that no definite agreement had been reached. Officials of the Texas Corporation spent a short time in California examining the properties of the California company. While no details have been made public, it is generally believed that the California Petroleum interests will be absorbed by the Texas Corporation. The former has about 2,000,000 shares of $25 par stock outstanding. It is producing about 1,500,000 barrels of oil monthly and is one of the largest distributors in California. The acquisition of the company by the Texas Corporation would give the latter a good foot-hold in California. During the past five years, many eastern oil companies have acquired extensive holdings in California, either through purchases or working agreements.

Navy Selling Gasoline From Reserve

Washington, D. C.—Bids for the sale of royalty casinghead gasoline produced from leases on Naval Petroleum Reserve No. 1, California, will be opened at the office of the inspector of naval petroleum reserves in California, Los Angeles, on January 16, it has been announced by the Navy Department.

The contract to be made under the proposals sent out will run from February 1, 1928, to January 31, 1929. The average production of royalty casinghead gasoline from the leases covered for the five months ended with September, was 7472.7 gallons per month.

Fruitvale Test Fishing

Bakersfield, Calif.—The Pacific Eastern Production Company, subsidiary of the Gulf Oil Corporation, is fishing for a disc bit in its Fruitvale test, near this city, and has been unable to make the scheduled production test of a good sand found from 3824 feet to the bottom of the hole at 3850 feet. Early reports that the company had encountered good showings proved correct, and interest has again been centered on the area. The Fruitvale test is northwest of Bakersfield and several miles from the company's Union Avenue wildcat which attracted so much attention early last summer.

Potrero

Los Angeles.—Potrero, which threatened a few months ago to become a factor in California oil circles, is attracting additional interest, following the announcement that two or three more wells probably will be drilled during the spring months. Operators who have been closely watching the district have derived little satisfaction from the action of the Associated's Cypress 1, which was a commercial producer for a short time. The well was drilled to 5408 feet, but all efforts to cement the 4¼-inch casing at 5283 feet have failed. The failure of the Cypress well has been a factor in the hands-off policy displayed by operators holding leases which must be drilled as soon as a consistent producer is completed.

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Champagnolle Area Looks Like Real Field

SHREVEPORT, La.—It would seem as though a continuation of efforts on the part of the present interested operators is all that is necessary to eventually make a real, worth while, producing oil field of the new Champagnolle area, in Union County, as witness the performance of the Gregory 1, in section 10-17-14, which was drilled by the Garrett-Modisette Drilling Company several weeks ago, but was recently sold to the Keene & Woolf interests. This well was completed about 30 days ago as a small producer, perhaps making as much as 50 barrels of oil a day, when it could be kept swabbing constantly, and blew in of its own accord, unexpectedly, on Thursday, of last week, flowing at the rate of about 2500 barrels of fluid a day, a small per cent of which was salt water. On the following day another successful completion in this new field was recorded, when the Ohio Oil Company brought in Crain 7, in section 1-17-14, flowing at the rate of about 4000 barrels of fluid, 40 per cent salt water.

The Garrett-Modisette Drilling Company and Keene & Woolf's Gregory 1 was originally tested at 2765 feet, the present total depth of the hole, at which time it showed oil testing around 19 gravity. It has been bailed and swabbed at intermittant periods in the hope that it would flow. Several days ago, the well was closed in pending the outcome of a deal with the Keene & Woolf interests, which deal was closed during the past week, and on Thursday, January 5, the well was opened up. It immediately began flowing at the rate of approximately 2500 barrels of fluid, about 10 per cent salt water and 6 per cent basic sediment, the gross output from the well being badly cut by the salt water content. The well was turned into a flow box immediately, as it was making between 15 and 20 million cubic feet of gas, which sprayed the oil considerably, and was left to flow wide open into a pit in which the flow box was located. A line pump was then installed and began picking up the fluid from the pit and pumping it into a treating unit, located nearby. After flowing at its original rate for a period of about 24 hours, the well began making an increased amount of salt water and a decreasing amount of oil, finally declining to a gross output of oil and salt water 1500 barrels daily, 40 per cent of which was water, at which rate it is now flowing.

The Gregory well is located approximately one and one-half miles southwest of the bulk of the drilling that has been done in the Champagnolle area, and is the first well to make a test of the sand at the 2700 foot level. The majority of drilling has been conducted in sections 1 and 2, of township 17, range 14, by the Ohio and Magnolia Companies, and E. M. Jones, which drilling was prompted as the result of the successful completion of the Ohio Oil Company's Crain 1 and the Magnolia Petroleum Company's Carroll 2. The latter well is now flowing around 285 barrels of clean oil daily, almost three months after it was completed, being brought in with an initial production of only about 400 barrels a day. From that time until November 24, activity in this section registered no interesting developments. But E. M. Jones' Crain 1 was brought in on November 24, flowing 2000 barrels, and it was the signal for the start of active operations, resulting in the drilling of approximately 15 wells in the immediate vicinity. For the most part, the wells that have been tested around the gusher well to date have proved disappointing, an offset to the east getting only dry gas, while an offset to the south was completed as a small well.

These facts, together with the bringing in of the Ohio Oil Company's Crain 7 well, located only one location north of a dry gas well, not to mention the action of the Gregory well, in section 10-17-14, although it is in an entirely different sand, led to the belief that the area is to be a treacherous one, with plenty of reason for careful drilling and coring before wells are completed. The presence of salt water in all wells except the Magnolia's Carroll 1 should also cause operators to exercise care in bringing in their wells. It would appear from information gained from wells that have been completed, that the sand is to be found at a fairly uniform depth. The Ohio Oil Company's Crain 7 was completed at 3033 feet, after taking in only four feet of sand, while E. M. Jones' Crain 1 was completed at 3062 feet, also in four feet of sand. Difference in elevation makes both wells about the same depth, sub sea level. The present week will witness some important tests in the vicinity of the 40-acre lease upon which the Jones producer is located, as the Ohio Oil Company has completely surrounded this tract with wells, approximately a half dozen of which are drilled down to the sand with casing set, or will reach the sand within the week. E. M. Jones also will probably test two wells during the week.

Aside from the Union County activity, about the only work of interest in the Arkansas fields is a test that is being drilled by the Lion Oil Refining Company, on the Horn lease, in section 17-17-13, which created considerable excitement last week when it was reported that it had cored a sand at 3106 to 3109 feet that showed a considerable amount of gas. The sand failed to come up to expectations, however, when tested with a patented sand tester, and the well is now being drilled deeper.

The Richland Parish gas area and the Trinity sand drilling, in the Pine Island district, were without interesting developments during the week. Three small producers were completed in the Pine Island field, all in the 3900 foot pay sand; and all of them were reported as less than 100 barrel producers, the three adding only 160 barrels of new production. In the Pleasant Hill field, the Benson Oil Company, which recently completed Wolf 1, in section 3-10-13, as a five mile extension to the producing field, made location for Wolf 2. The first well was put on the pump during the week and produced at the rate of 110 barrels, but could not be pumped continuously, due to the gas working in it.

Ohio Gas and Oil Men Join Association

New York—The Ohio Gas and Oil Men's Association, which has a membership of about 1700, has become affiliated with the American Gas Association, according to Oscar H. Fogg, president of the latter organization. With the entrance of the Ohio group, the membership of the American Gas Association was increased to 16 associations, the other 15 including gas associations throughout the United States and in Canada.

Established July 10, 1918, at Columbus, the Ohio association has developed into one of the most active State organizations in the country. The annual conventions have been especially well attended—more than 1000 were registered at a recent convention; and the programs have been outstanding for their valuable papers and contributions to the advancement of the gas industry.

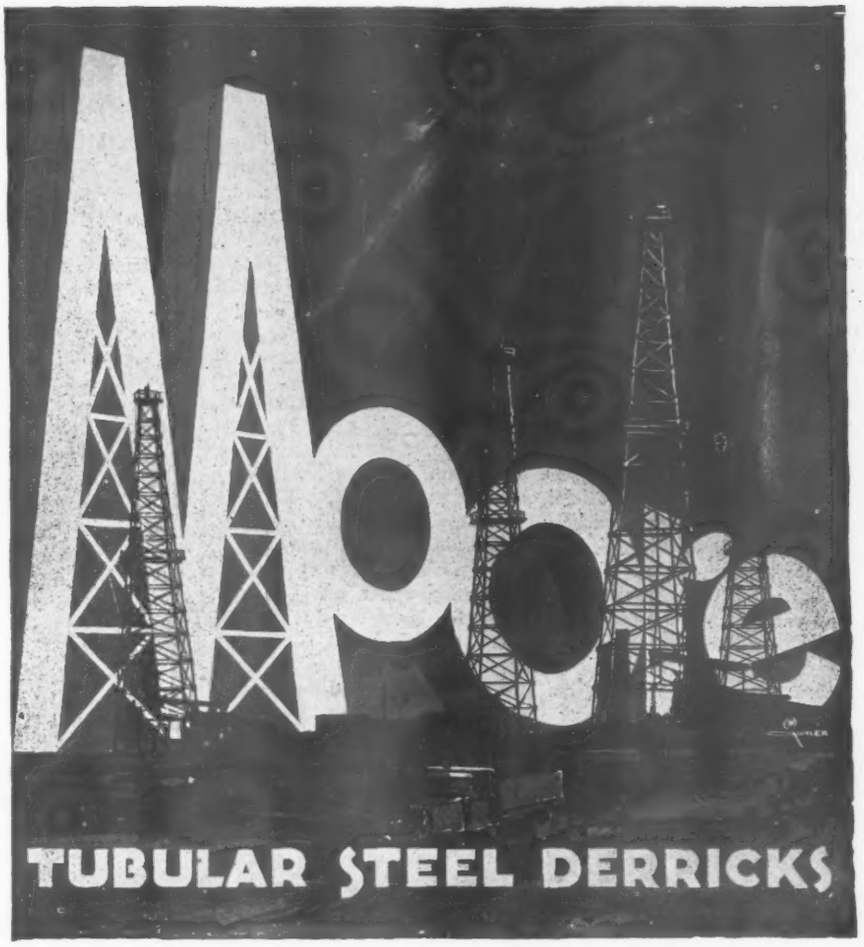
John J. McMahon of the East Ohio Gas Company, Cleveland, is president of the Ohio association, and William H. Thompson, 811 First National Bank Building, Columbus, is secretary-treasurer.

Affiliation with the American Gas Association gives the group members representation in the section committees, and stimulates the exchange of valuable information.

Russian Production Up In October

Washington, D. C.—A new monthly record for oil production in Russia was established in October, according to figures received here by the Soviet Union Information Bureau. The October output was 945,571 metric tons, as compared with 853,593 metric tons in September. It represented an increase of 18 per cent over the yield for October, 1926, and an increase of 23 per cent over the average monthly output for 1913.

Oil exports of 178,342 metric tons for October showed a decrease of 27 per cent from the record export of 245,809 metric tons in September. The exports for October, 1926, were 172,000 metric tons.



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Established 1907

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CASPER, WYO. SHREVEPORT, LA. EL DORADO, KAN. EL DORADO, ARK.

Say you saw it in The OIL WEEKLY

Mountain States Field Development Notes

La Barge Pipe Line Starts Building May 1

Kemmerer, Wyo.—The pipe line from the LaBarge field to railhead at Opal, Wyoming, will be started May 1, 1928, according to definite announcements made upon the completion of the 30-day gauge conducted by officials of the Midwest Refining Company, the Utah Oil Refining Company and the California Petroleum Corporation on the production from the field. The average is said to have been about 2200 barrels per day, which is considered sufficient to warrant the construction of the line.

The line will be of four-inch pipe, and will be 45 miles in length. Its completion will be a great convenience and saving to operators in the field. At present time the oil is being trucked from LaBarge to Susie, a station on the Oregon Short Line, six miles north of Kemmerer. Under present prices of crude, there has been little or no profit in producing oil at La Barge, but with a pipe line a considerable saving will be effected and a more intensive drilling campaign will be expected in the future.

Norris Wants More Light On Sinclair Deal

Washington, D. C.—Completion of the investigation of leases upon naval oil reserves, with especial reference to the activities of the Continental Trading Company, has been asked of the Senate by Senator Norris of Nebraska, in a resolution which will be brought up for discussion in the near future.

The original investigation was never completed, being suspended because of the refusal of Harry F. Sinclair to answer questions of the committee, and no final report has ever been made to the Senate, Senator Norris explained.

"In the case of the United States against Harry F. Sinclair and Albert B. Fall," he said in his resolutions, "it was disclosed upon the trial that a fraudulent corporation, known as the Continental Trading Company of Canada, had been organized for the purpose of using the profits of its business in the bribing of public officials of the United States and for other dishonest, dishonorable and illegal purposes.

"It was disclosed upon said trial that profits of said corporation were invested in Liberty bonds of the United States and that only a portion of said Liberty bonds so invested had been definitely traced and accounted for and that a large amount of Liberty bonds coming into the hands of said fraudulent corporation had been unaccounted for and unexplained."

The resolution would authorize and direct the Committee on Public Lands to renew and continue the investigation provided for in Resolutions 282 and 294 passed by the Senate in the Sixty-seventh Congress. It is also provided that the committee "is specifically directed to make an investigation as to the transactions and activities of the said fraudulent corporation, the Continental Trading Company of Canada, and it is specifically directed to trace all the government bonds held and dealt in by said corporation with the purpose of ascertaining the beneficiary or beneficiaries of all the illegal transactions connected with the fraudulent and dishonest sale or leasing of the said naval oil reserves."

Refinery at Craig, Colo., Is Rumored

Craig, Colo.—Although there has been no official announcement made, it is reported here that the Shaffer Oil & Refining Company of Tulsa plans to construct a refinery in Craig. The company has a joint drilling operation under way in Iles Dome field, with the Yarg Producing & Refining Company, and it has a contract for the further development of Yarg properties in the district. Should the company get major production at Iles, it would mean the laying of another pipe line from the field to railhead here, and perhaps the construction of the proposed refinery.

Midwest Refining Company's pipe line from the field to the tank farm near here is practically completed; it is expected that oil will be running by January 15. With its own line in operation, it is stated that the Midwest will ship its Iles crude to its subsidiary, Utah Oil Refining Company, at Salt Lake City.

Texas Production Company has practically completed its short line from Iles to the Moffat field, and when it is in operation the company will have a continuous line from Iles, via its tank farm, to its refinery and loading racks here.

One of the most interesting field reports is that from the Texas Production Company's No. 10 Knowlton well on Moffat dome, which is reported rigging up to pump production encountered in the Sundance sand. If this production proves commercial, it will assure the development of the Moffat field as it has that of Iles, of the drilling of Sundance sand wells.

More Bannatyne Tests

Great Falls, Mont. — In spite of the fact that about 25 wells have been drilled and abandoned on Bannatyne dome and that the production of the two discovery wells is now an uncertain quantity, moderate weather will be welcomed by the immediate drilling of five or six new tests, all to be located on the south end of the Sweetgrass arch. The series of structures included in what is known as Sweetgrass Arch were approved by Ralph Arnold, internationally known geologist, who with Charles A. Mau came into Montana about two years ago for the development on a new plan which incorporated the pooling interests, profits and losses of several structures to be tested.

Oregon Basin Producer Shut in for Storage

Casper, Wyo.—A highly exaggerated report was sent over press wires this week concerning the completion in Oregon Basin of the second producing well. Cody Petroleum Company was credited with having brought in a 25,000 barrel producer in its Klindt 1, on 7-31-100 in the north end of the field, while as a matter of fact the company had drilled but one foot into the Embar-Tensleep series and had a showing of 1400 feet of oil standing in the hole. The operation was shut down pending the arrival of tankage and until storage is erected and connected with the Illinois Pipe Line Company's line there can be no accurate gauge made of the well's production.

The Ohio Oil Company drilled the discovery well on this structure, but no test of the production has ever been run. That it is a large producer is taken for granted, inasmuch as the Ohio built considerable tankage, laid a line to railhead at Cody, and built loading racks there, after having brought in but one well. It also purchased the extensive holdings of the Enalpac Oil Company on the structure, and has spotted locations for a half dozen tests, two of which are now drilling, and the third of which has a rig up.

It is of course possible that upon deeper drilling the well will come in with the tremendous flow which characterized the discovery well. In that case the value of the north end of the field, which has previously been questioned, will be assured.

There are at present about 21 drilling wells and rigs up in Oregon Basin proper. Spring will doubtless see the start of as many more operations, since the area is by far the most interesting in the State at the present time.

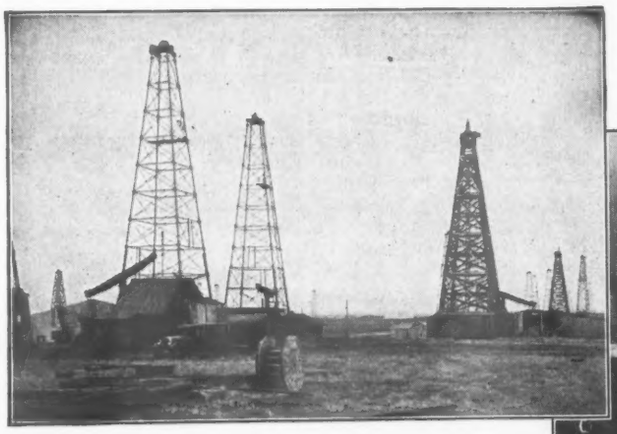
Water in Reiter-Foster Colorado Test

Rock Springs, Wyo.—Reiter-Foster Oil Corporation test on Hiawatha Dome, sec. 16-12-104 Northeastern Colorado, has developed water in the supposed Wasatch formation, and has announced its intention to drill 200 feet deeper. It was in this sand on this structure that the W. A. Myers interests and the Ohio Oil Company both got big gassers, and the discovery of water in the Reiter-Foster test is considered puzzling. Well is three-quarters of a mile west of the Myers discovery, which lies between the Ohio and the Reiter-Foster tests.

Geologists of the district are of the opinion that a transverse fault must intersect and cut the down-dip of the axis between the Myers gas well and the Reiter-Foster test. The structural displacement in that case would be immense, and there is a theory now receiving credence that the main body of the structure may run northward from the discovery.

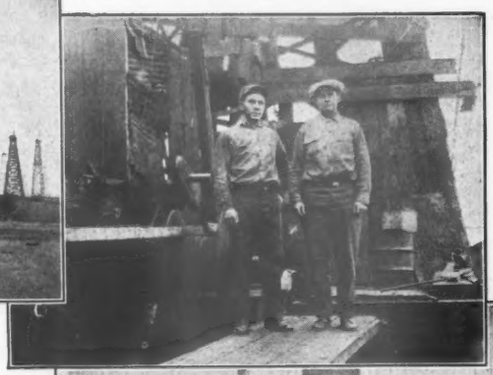
FRANKLIN VALVELESS
OIL AND GAS ENGINES

For Any Job in Any Field



T. B. Slick—Endicott Lease, Tonkawa, Okla.
Seven Franklins in service.

J. R. Lawson, Tool Dresser
W. C. Milam, Driller on
Endicott 2 E Well



T. B. Simmons, Tool Dresser, and Geo. I. Miller,
Driller with 40 H. P. Franklin Gas Engine.

Drilling

If it's speed and economy you're after, take a tip from veteran contractors and hitch your tools to a Franklin Valveless.

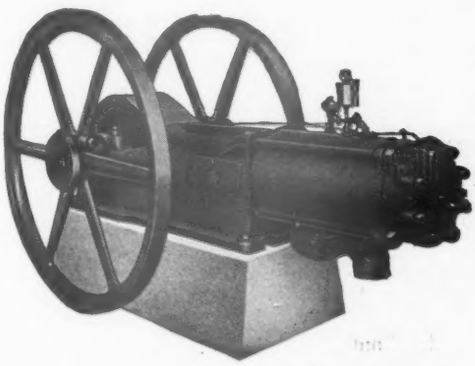
This dependable, flexible power plant is making a name for itself and a reputation for its users in every worth while field. By *speed* we don't mean number of revolutions per minute, but one-truck transportation, easy installation, quick starting and absolute dependability month after month with the least amount of attention. Those are the advantages that *count,* whether you're contractor, superintendent or owner.

As for expenses—a Franklin Valveless (oil or gas) costs less to run than a flivver, and repair costs aren't worth mentioning.

Swabbing

Just because Franklin Pumping Engines are light and economical, don't get the idea that they aren't powerful. T. B. Slick, whose lease and crews are shown above, has seven 40 H. P. Franklins in this field, and four of them have been used continuously on swabbing jobs for the past year. Mr. Slick reports—"no trouble, no repairs to date."

FRANKLIN VALVELESS
ENGINE COMPANY
Franklin, Penna.



Pumping Engines

When T. B. Slick of Tonkawa, Okla. was through drilling, he found it economical to transfer those power plants to new locations and replace them with light Franklin Gas Pumping Engines. The pumpers were installed right on the old foundations without so much as changing a single bolt hole!

Distributed by

OIL WELL SUPPLY CO.

Branch Stores in All Oil Fields

West Texas Production

CRANE COUNTY

	Producing Wells	Average Prod.
Church and Fields—		
Simms Oil Co. & Atlantic Oil Prod. Co.	31	19,065
Prairie Oil & Gas Company	11	13,855
Landreth Production Corporation	16	10,940
Tidal Oil Co. & Turman-Maxwell	24	*8,065
Eastland Oil Co. & Collett-O'Keefe	8	5,815
Humble Oil & Refining Company	13	5,430
Pecos Oil Company	13	4,670
Magnolia Petroleum Company	31	4,365
Independent Oil & Gas Company	6	1,930
Gulf Production Company	10	1,730
Church-Fields & Bert Weekly	3	1,195
Geo. Church & Bob Fields	2	205
The Texas Company	2	295
Stidham & Thrasher	1	10
Totals	171	77,570
Gulf-McElroy—		
Gulf Production Company	55	17,505
Gulf-Waddell—		
Gulf Production Company	1	20
Marland-Hughes—		
Marland Oil Company	16	715
The Texas Company	9	290
McMan Oil & Gas Company	2	65
Independent Oil & Gas Company	1	5
Totals	28	1,075
Totals for Crane County	255	96,170

UPTON COUNTY

Texas & Pacific Coal & Oil Co.	17	2,325
Roxana Petroleum Corporation	36	1,990
Marland Oil Company	70	1,780
Gulf Production Company	15	1,640
Dixie Oil Company	36	1,490
Prairie Oil & Gas Company	8	1,050
Humble Oil & Refining Company	10	1,045
Champlin Refining Company	3	920
The Texas Company	22	855
Independent Oil & Gas Company	26	550
Amerada Petroleum Corporation	6	290
Orient Oil Operating Company	1	245
Snowden & McSweeney	1	180
Sun Oil Company	10	175
Wentz Oil Corporation	3	120
Republic Prod. Co. & Marland Oil Co.	5	95
Tidal Oil Company	3	95
The Texas Co. (was Pure)	1	50
Simms Oil Company	3	45
Bryant & Atlantic Oil Prod. Co.	2	40
Atlantic Oil Producing Company	1	35
McMan Oil & Gas Company	2	25
Texon Oil & Land Company	1	15
Totals	282	15,055

REAGAN COUNTY

Big Lake Oil Company	123	16,160
Texon Oil & Land Company	79	6,640
Totals	202	22,800

PECOS COUNTY

Mid-Kansas-Transcontinental	39	*14,875
The California Company	12	*9,275
Gulf Production Company	6	*5,655
Gulf Prod. Co. (Crockett County)	3	*1,105
McMan Oil & Gas Co. & Marland	13	*5,405
Roxana Petroleum Corp.	7	*5,205
Simms Oil Company	3	*4,755
Humble Oil & Refining Company	8	*1,905
Marland Oil Company	10	*1,560
Red Bank Oil Company	2	*260
Pandem Oil Corp. et al (was Crude Oil)	3	*150
Mazda Oil Corp. & Savoy Oil Co.	1	*140
Osage Oil Corp. et al (Crockett County)	1	*50
Kirby Pet. Co. & Edson Pet. Co.	1	*..
Totals	108	50,340

WINKLER COUNTY

Landreth Prod .Corp. & Roxana	4	9,050
Southern Crude & R. A. Westbrook	5	8,420
Atlantic Oil Producing Company	4	8,065
Cranfill-Reynolds et al	3	*5,665
Humble Oil & Refining Company	3	*5,205
Independent Oil & Gas Co.	4	*4,855
Gulf Production Company	6	*4,825
Southern Crude & Dixie Oil Company	6	*4,665
Republic Production Company	1	3,300
Roxana Petroleum Corp.	2	*3,160
Magnolia Petroleum Company	2	*3,100
Texon Oil & Land Company	1	*1,295
Murchison-Cranfill Bros. Oil Co.	4	985
Joe Maxwell & L. C. Turman	2	*825
The Texas Company (was Pure)	2	*700
Llano Oil Company & Roxana	1	20
Totals	50	64,135

HOWARD COUNTY

Magnolia Petroleum Company	42	3,890
Marland Oil Company	35	1,115
Pure Oil Company	4	305
Sweeney & Henry et al	1	145
Bristow & Merrick	4	145
Lockhart & Co. et al	7	135
Coyle-Concord Oil Co.	2	125
F-H-E Oil Company	2	90
Godley Oil & Gas Company	1	80
Frank M. Greene Corp.	2	70
Mid-West Exploration Co.	2	60
Vitek Oil Company	1	45
Tidal Oil Company	2	40
Humble Oil & Refining Co.	2	35
Comet Petroleum Company	2	25
Marland Oil Co. and Group One Oil Corp.	1	25
L. C. Harrison et al	2	25
Owen-Sloan Oil Company	1	20
Gulf Production Company	2	10
Totals	115	6,385

JONES COUNTY

Phillips Petroleum Company	11	770
Marland Oil Company	3	340
Mid-West Exploration Co.	4	110
Stebbins Oil & Gasoline Co.	1	15
Totals	19	1,235

MITCHELL COUNTY

The California Company	97	2,420
Magnolia Petroleum Company	22	510
Atlantic Oil Producing Co.	8	205
Eastland Oil Co. et al	9	180
Tidal Oil Company	2	30
Fred Carey et al	1	20
Totals	1	3,365

CROCKETT COUNTY

Humble Oil & Ref. Co. and Marland Oil Co.	13	610
Cushing Ref. & Gasoline Co.	2	365
Gulf Production Co.	6	325
Taylor-Link Oil Co. & Kirby Pet. Co.	1	270
E. L. Smith Oil Company	5	220
Pecos Oil Company	3	125
Republic Prod. Co.	2	105
Roxana Petroleum Corp.	1	15
Totals	33	2,025

RUNNELS COUNTY

Vacuum Oil Co. & Hill-Ladd	1	80

LOVING COUNTY

Lockhart & Company et al	2	70

SCURRY COUNTY

The Northwest Company	5	45

ECTOR COUNTY

The Texas Company and J. S. Cosden	1	15
Totals for all fields	1,212	261,730
Totals for previous week	1,198	257,290

(*) Production partially pinched.

H. W. Page Offers a New Way to Buy

Page Semi Portable Oil Field Equipment

PAGE WILDCAT Rotary Drilling Units
Gasoline Rotary Drive Units
Gasoline Cable Tool Drive Units
Gasoline Power Units for All Purposes
Roller and Ball Bearing Safety Traveling Block
Make and Break Attachment for Any Rotary
Standard Equipment of Other Manufacturers

TWO hundred thousand dollars has been spent developing practical, portable, economical equipment, using the experience of the practical oil field man as a basis and applying the assembled engineering brains and experience of internal combustion engineering experts, metallurgists, the best possible engineers on gearing problems, the best engineering experience on ball and roller bearings in this country and Europe, expert mechanical and electrical engineers and practical machinery manufacturers to build on a production basis oil field machines at a low cost and equal to any oil field equipment. These men were not inhibited by the necessity of using old patterns, jigs, fixtures and shop equipment nor were they handicapped by established precedent. Therefore an absolutely new line of machinery has been developed that is showing a wonderful operating saving, low maintenance cost, very low transportation cost and equipment easily adaptable to varying oil field conditions and standards.

I HAVE taken advantage, as far as practical, of some of the automotive methods of manufacture, the most highly developed and economical manufacturing methods in the world. I am also taking advantage of the automotive method of selling. This equipment will be sold for cash and through a SELLING CORPORATION in your territory, as the automobile, truck and tractor are now sold. This means one standard established price for quantity bought with no favorites. Discounts are allowed for cash purchases. This method of selling put over the greatest industry in the world today. It is known and accepted as economically sound. It applies to the company with unlimited resources as well as the small operator. This method is beneficial to the large oil company, the large and small contractor.

THE contractor's income is necessarily effected by the uncertainty in his actual drilling operations, the fluctuations in the drilling programs of large companies and the uncertainty of the locations where he may be required or compelled to drill. This method reduces his financing worries. He is not compelled to mortgage his birthright in periods of depression but knows definitely for a period of twelve months or more the load necessary for him to carry. This makes him a better contractor, giving him more time for the actual work and reducing the cost of drilling eventually to the company for whom he is working.

YOU are asking, "Is it practical and can it be applied to oil field machinery?" I answer the question by an illustration in your own equipment. Your Rotary drill, Pumping equipment, Derrick or other main pieces of machinery or tools outlast the life of your trucks, cars and tractors. I believe any contractor or company can check this fact. Therefore this system is practical and can be applied and it is evident that this method, therefore, automatically insures servicing and replacement of parts wherever the machine may be.

Investigate for Full Particulars, etc.

H. W. PAGE, INC., **31 WASHINGTON SQ. W., NEW YORK CITY**

United States Daily Average Production

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision:

1926	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Daily Ave.	United States Total
January	445,950	99,600	256,500	90,100	43,800	178,000	100,450	101,700	618,750	1,934,850	59,979,900
February	450,300	102,050	246,600	91,550	45,300	169,400	98,950	101,050	604,950	1,910,150	53,483,900
March	457,900	103,000	260,500	91,950	48,800	165,700	97,800	102,100	604,400	1,932,150	59,897,250
April	464,850	102,600	265,600	90,900	51,550	170,750	101,750	107,300	600,650	1,955,950	58,678,000
May	463,350	106,150	280,050	93,700	59,100	175,700	106,100	111,650	602,400	1,998,200	61,944,950
June	459,100	107,900	305,100	91,350	60,350	166,950	106,050	113,300	607,550	2,017,650	60,529,350
July	456,700	110,450	336,300	116,550	57,100	161,650	104,650	107,750	614,400	2,065,550	64,032,300
August	465,300	111,750	383,800	162,800	56,800	157,350	108,600	110,600	608,900	2,165,900	67,143,450
September	466,050	113,400	403,750	175,200	56,850	153,250	110,200	104,700	598,150	2,181,550	65,446,500
October	503,350	114,650	444,700	169,900	58,200	149,500	109,450	98,500	614,200	2,262,450	70,136,500
November	550,700	115,800	477,000	176,900	56,450	143,700	111,150	92,900	643,650	2,368,250	71,047,550
December	564,250	118,800	480,800	181,900	54,800	138,600	110,050	85,650	660,400	2,395,250	74,252,700
1927											
January	598,500	117,200	466,400	173,900	52,900	131,550	107,850	84,450	653,450	2,386,200	73,972,150
February	693,350	116,250	479,800	154,600	52,800	128,200	107,150	85,300	642,700	2,460,150	68,884,300
March	710,350	116,100	475,000	154,750	51,450	124,500	104,400	87,600	640,850	2,465,000	76,414,900
April	723,700	115,400	477,300	155,100	50,500	113,350	108,000	89,350	644,550	2,477,250	74,317,750
May	742,200	114,600	488,700	151,300	47,450	112,700	114,000	89,300	633,550	2,493,800	77,307,700
June	768,600	112,200	480,800	151,650	49,150	112,450	111,850	86,050	638,550	2,511,300	75,338,900
July	846,750	107,750	475,800	142,950	56,200	109,900	111,800	86,950	620,700	2,558,800	79,322,300
August	832,900	105,100	483,450	139,350	56,950	104,750	114,600	80,750	621,450	2,539,300	78,717,850
September	797,450	105,200	493,750	142,900	53,450	101,350	110,800	74,500	637,250	2,516,650	75,498,900
October	782,300	105,100	497,900	138,400	51,300	100,450	113,600	73,250	629,000	2,491,300	77,230,000
November	766,900	106,650	501,750	138,100	49,400	97,850	114,900	75,050	623,850	2,474,450	74,233,500
December 3	766,000	106,300	507,300	135,850	48,000	96,650	113,750	79,550	626,400	2,480,750	17,365,250
December 10	736,200	106,050	546,500	141,150	47,650	96,100	112,000	74,450	627,400	2,487,500	17,412,500
December 17	720,300	105,050	532,450	141,700	47,200	95,200	111,000	79,950	624,100	2,456,950	17,198,650
December 24	705,750	105,550	533,400	136,200	47,000	94,350	110,500	78,050	621,300	2,432,200	17,025,400
December 31	701,250	107,850	524,650	135,500	46,600	93,350	110,500	75,250	624,800	2,419,750	16,938,250
1928											
January 7	674,900	107,300	517,450	132,750	44,600	90,150	110,000	77,700	624,200	2,379,050	16,583,350
Increase	.....	.....	.....	.....	.....	.....	.....	2,450	.....	.....	.....
Decrease	26,350	550	7,200	2,750	2,000	3,200	500	.....	600	40,700	284,900

TEXAS

(Outside Gulf Coast)

PANHANDLE DISTRICT

	Jan. 7	Dec. 31
Hutchinson County	51,300	52,400
Gray County	16,500	18,800
Carson County	7,450	7,700
Wheeler County	1,200	1,300
Others	50	50
Totals	76,500	80,250

NORTH TEXAS

Burkburnett	12,050	11,950
Electra	11,500	11,650
Iowa Park-K-M-A	1,850	1,900
Wilbarger	10,950	11,000
Archer County	22,600	22,750
Clay County (Petrolia)	600	600
Baylor County	100	100
Montague and Cooke Cos.	15,000	15,050
Totals	74,650	75,000

WEST CENTRAL TEXAS

Stephens County	7,800	8,000
Coleman County	1,050	1,000
Brown County	15,950	17,000
Eastland-Desdemona	9,000	9,300
Callahan County	4,250	4,300
Shackelford County	5,200	4,950
Young County	9,950	10,150
Throckmorton County	1,200	1,000
Jack County	1,600	1,050
Palo Pinto County	450	450
Others	500	400
Totals	56,950	57,600

WEST TEXAS

Jones County	1,300	1,350
Mitchell-Scurry Cos.	3,400	3,400
Howard County	6,200	6,650
Reagan County	22,050	22,800
Crane-Upton Counties	107,100	111,400
Crockett County	2,200	4,250
Pecos County	53,200	48,350
Winkler County	61,200	60,000
Others	2,250	2,400
Totals	258,900	260,600

EAST CENTRAL TEXAS

Mexia	8,300	8,350
Currie	600	600
Richland	700	700
Wortham	2,200	2,250
Corsicana-Powell	13,000	13,000
Nigger Creek	1,850	1,900
Totals	26,650	26,800

SOUTHWEST TEXAS

Luling	13,500	13,850
Lytton Springs	1,600	1,600
Somerset	800	800
Laredo District	7,100	7,350
Dale	400	400
Others	400	400
Totals	23,800	24,400
T'tl Tex. (Outside Gulf Coast)	517,450	524,650

TEXAS GULF COAST

West Columbia	8,450	8,500
Damon Mound	900	800
Big Creek	2,050	2,150
Boling	2,100	2,100
Blue Ridge	3,950	3,900
Pierce Junction	11,850	11,800
Humble	1,850	1,900
Goose Creek	7,300	7,400
South Liberty	2,200	2,300
Hull	12,050	12,450
Saratoga	1,000	1,000
Batson	1,200	1,300
Sour Lake	3,650	3,900
Spindle Top	52,050	53,400
Orange County	4,050	4,200
Barbers Hill	950	900
Others	2,300	2,450
Totals	117,900	120,450
Texas Total	635,350	645,100

OKLAHOMA

North Braman	3,050	3,100
South Braman	1,850	1,850
Blackwell	3,850	3,850
Hubbard	2,800	2,800
Thomas	1,800	1,900
Tonkawa	15,000	15,150
Garber	10,150	10,450
Burbank	37,100	38,600
Osage (outside Burbank)	29,800	29,700
Watchorn	1,250	1,300
Cushing	21,000	21,050
Yale Jennings	9,000	9,050
Davenport	2,200	2,350
Bristow Slick	24,500	24,600
North Okmulgee	16,000	16,000
Lyons Deaner	6,150	6,200
Stroud	1,200	1,250
Cromwell	10,600	10,650
Papoose	5,500	5,600
Wewoka	9,000	8,950
Seminole	53,700	56,650
Bowlegs	102,950	107,950
Searight	20,150	21,150
Little River	36,350	38,150
Earlsboro	124,700	137,450
Duncan District	6,750	6,800
Graham	6,250	6,250
Fox	1,850	1,850
Healdton	14,500	14,600
Hewitt	9,100	9,200
Scholem Alechem	12,750	12,800
Others	74,050	74,000
Totals	674,900	701,250

CALIFORNIA

Santa Fe Springs	38,500	38,500
Long Beach	118,000	118,000
Huntington Beach	60,500	60,500
Torrance	20,000	20,000
Dominguez	13,500	13,500
Rosecrans	8,000	8,000
Inglewood	31,500	31,800
Midway-Sunset	81,000	81,000
Ventura Avenue	51,000	52,000
Seal Beach	41,500	42,500
Others	160,700	159,000
Totals	624,200	624,800

ARKANSAS

El Dorado	5,900	5,900
Smackover Light	8,500	9,200
Smackover Heavy	69,000	71,150
Stephens	1,150	1,150
Nevada	2,900	3,100
Lisbon	2,600	2,700
Others	100	150
Totals	90,150	93,350

KANSAS

	Jan. 7	Dec. 31
Greenwood County	30,800	31,000
Florence-Covert	1,400	1,450
Peabody-Ebling	3,750	3,750
Eldorado-Towanda	14,250	14,250
Augusta- Fox Bush	4,100	4,100
Rainbow Bend	2,100	2,050
Russell	2,300	2,300
Churchill	12,300	12,150
Others	36,300	36,800
Totals	107,300	107,850

NORTH LOUISIANA

Homer	4,350	4,550
Haynesville	6,400	6,750
Caddo Light	11,050	11,900
Caddo Heavy	3,900	4,050
DeSoto-Red River	4,250	4,200
Elm Grove	550	600
Bellevue	1,050	1,050
Cotton Valley	4,600	4,800
Urania	7,600	7,850
Pleasant Hill	850	850
Totals North Louisiana	44,600	46,600

LOUISIANA GULF COAST

Vinton	4,600	4,750
Lockport	5,000	4,800
Evangeline	1,150	1,150
Edgerly	2,350	2,850
Others	1,750	1,500
Total, La. Gulf Coast	14,850	15,050
Louisiana Total	59,450	61,650

MOUNTAIN STATES

WYOMING

Salt Creek	42,450	38,950
Grass Creek	2,300	2,500
Elk Basin	950	900
Big Muddy	2,700	2,700
Lost Soldier	2,550	2,700
Rock River	2,350	2,550
Lance Creek	650	600
Others	3,500	3,550
Totals	57,450	54,450

MONTANA

Cat Creek	1,850	1,850
Sunburst	9,000	9,500
Others	150	150
Totals	11,000	11,500

COLORADO

Moffats (Craig)	1,200	1,150
Fort Collins	3,000	3,150
Florence	800	950
Others	1,550	550
Totals	6,550	5,800

NEW MEXICO

Table Mesa	450	400
Artesia	1,450	1,450
Hogback	650	650
Rattlesnake	50	900
Others	100	100
Totals	2,700	3,500
Totals, Mountain States	77,700	75,250

EASTERN STATES

(Including Ill., Ind., Ohio, W. Va., Pa., Ky., and N. Y.)	110,000	110,500

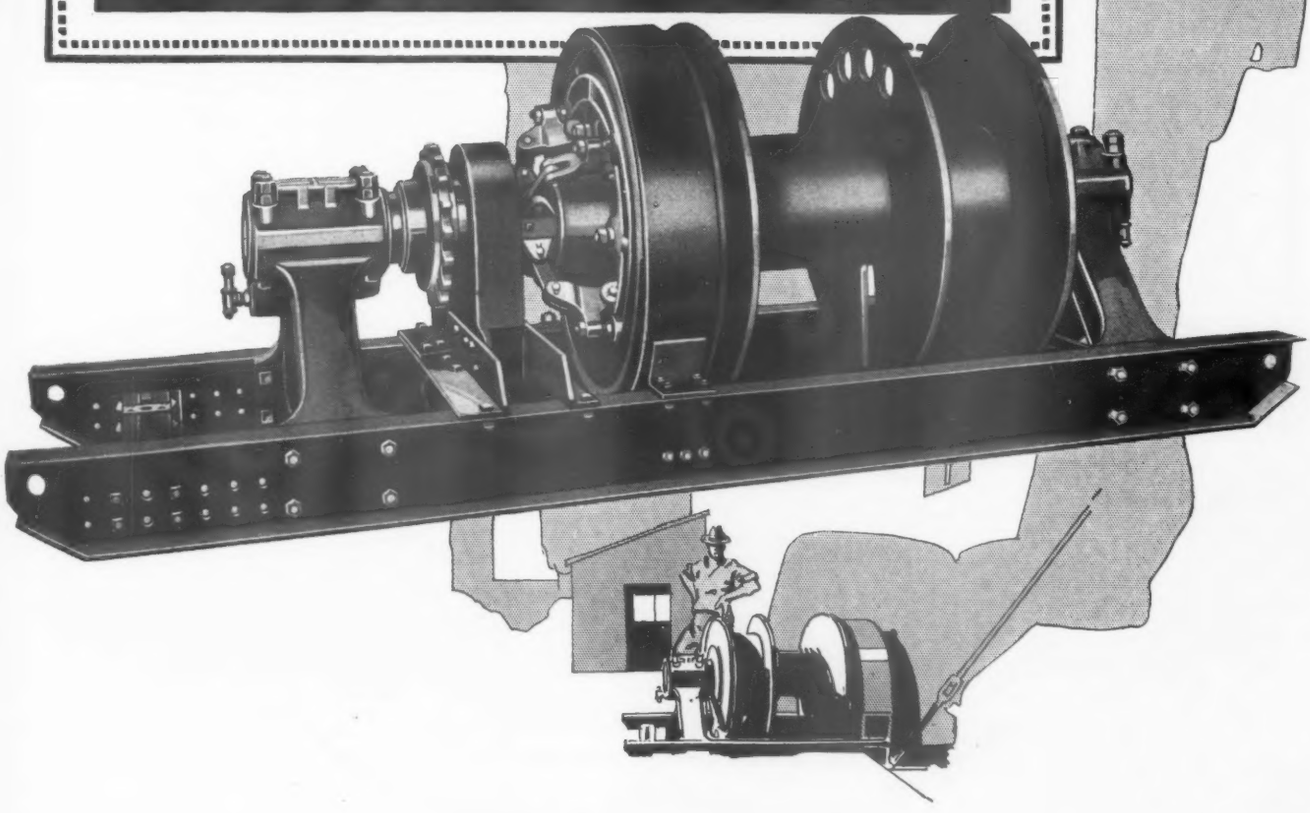
PRODUCTION SUMMARY

East of Rockies	1,675,150	1,719,700
United States	2,379,050	2,419,750

NATIONAL
CHAIN DRIVEN SAND REEL
TYPE "J"

DESCRIPTIVE BULLETIN No. – 18 N ON REQUEST

THE NATIONAL SUPPLY COMPANIES



Say you saw it in The OIL WEEKLY

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

SUMMARIZED REVIEW OF FIELD RESULTS

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Production This Week	Initial Production Last Week
Arkansas	13	3	3	1	1	1	9	1	85	25
California	13	9	12	8	..	..	1	1	12,040	1,840
Illinois	4	1	1	..	..	..	3	1	1	....
Indiana	3	..	..	..	..	..	3	..	....	....
Kansas	15	22	9	15	1	.	5	7	4,965	4,085
Kentucky	22	14	11	6	2	1	9	7	525	243
Louisiana	17	22	8	7	4	6	5	9	457	1,633
Michigan	..	8	..	4	..	..	..	4	...	58
Ohio	29	30	11	11	9	13	9	6	168	142
Oklahoma	55	59	28	28	10	14	17	17	7,643	10,580
Pennsylvania	5	1	1	1	2	..	2	..	20	10
Texas	98	64	50	36	7	3	41	25	57,279	71,427
West Virginia	19	8	4	3	13	5	2	..	18	195
TOTALS	294	241	139	120	49	43	106	78	83,201	90,238
Increase this week	53	..	19	..	6	..	28	..	...	...
Decrease this week	..	..	..	..	..	..	..	..	7,037	...

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; $—salt water; †—junked and abandoned; ¶—million cubic feet of gas; abn—abandoned; bbls—barrels; b. s.—basic sediment; csg—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—flshing; ft—feet; in—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; woar—waiting on standard rig.

KANSAS

Company, Well and Location	Initial Production Bbls.	Depth
BUTLER COUNTY—		
White Eagle O. & R. Co., Thompson 1, nec nw, 13-27-6e	*	3149
CHASE COUNTY—		
Westfield O. & G. Co., Lipps 4, c sw ne, 25-18-6e	*	1275
COWLEY COUNTY—		
Roth & Faurot, Adams 1, sec, 32-33-4e	¶4	1909
DICKINSON COUNTY—		
Loy et al, Sherman 1, nwc se, 24-16-4e	*	2551
GREENWOOD COUNTY—		
Empire O. & R. Co., Duby 18, nwc se sw, 14-22-11e	10	1910
Demler 5, nec, 25-22-12e	100	1722
Demler 6, nwc ne ne, 25-22-12e	300	1743
Blankenship Pet. Co., Perrie 1, nwc, 30-22-13e	35	1726
Paul et al, Hull 1, sec sw nw, 3-26-10e	*	2100
McPHERCON COUNTY—		
Merriman et al, Clark 1, c ne nw, 8-19-2w	*	3560
SUMNER COUNTY—		
Roxana, Community 9, lot 7, blk 36, 11-32-2e	75	2117
Derby Pet. Co., Spence 2, Tract 3, 14-32-2e	190	2094
Roxana, Emrich 7, 14-32-2e	1810	2096
Community 8, lot 9, blk 54, 14-32-2e	200	2106
Wasson et al, Gassoway 1, nec se sw, 14-32-2e	2245	2076

OKLAHOMA

Company, Well and Location	Initial Production Bbls.	Depth
CARTER COUNTY—		
Magnolia, Tivis 1, nwc, 20-1s-3w	*	4100
CHEROKEE COUNTY—		
Atkinson et al, Fee 1, nwc, 36-19-21e	*	2400
COTTON COUNTY—		
Magnolia, Pe-See 1, nec se, 30-1s-9w	¶7	2181
J. W. Ray, Koehler 1, nwc se, 22-2s-11w	*	2212
CREEK COUNTY—		
Prod. & Ref. Corp., Harjo 2, sw ne se, 18-14-10e	10	2900
Harjo 5, nw se ne, 18-14-10e	320	3434
Dixie Oil Co., Tahkaney 1, sec sw se, 7-19-9e	425	2867
Devonian Oil Co., Bigpond 5, sec nw ne, 36-15-7e	40	2471
Gled Oil Co., Knight 3, nwc ne ne nw, 24-19-8e	50	2290
Silurian Oil Co., Simpson 26, nec se sw, 8-18-7e	4	2543
Kennedy, Horner et al, Tiger 4, cwl nw nw, 25-18-11e	*	2311
GARFIELD COUNTY—		
Sinclair, Hoy 23, c sw ne, 25-22-4w	64	2121
Champlin Ref. Co., Stoner 1, nwc se, 24-24-3w	*	2745
Sinclair, Wilkinson 1, swc ne, 2-20-5w	*	6254
HUGHES COUNTY—		
Dixie, Cornelius 3, se sw sw, 17-8-10e	¶26	3739
KAY COUNTY—		
Harris & Haun, Tickle 1A, sec, 25-29-1w	¶1	970
Wentz Oil Corp., Blackwell Country Club 2, se sw sw, 20-27-1w	¶1	702
Larutan Fuel Co., Rembe 2, nec nw nw, 29-27-1w	¶1	711
Greer & Walters, Skein 1, c sw sw, 19-29-1e	*	1535
MUSKOGEE COUNTY—		
Hillside O. & G. Co., Sango 10, c sw sw, 28-15-15e	15	1273
R. J. Lambert, Grayson 2, nec se, 22-13-15e	*	1700
C. M. Bradley, 1, blk 77, csl ne ne, 34-15-18e	*	1980
Jack Summers, Beams 2, swc ne nw, 28-15-16e	*	1804
OKFUSKEE COUNTY—		
Burk Greis Oil Co., Deer 3, c ne sw, 36-11-9e	¶14	2925
OKMULGEE COUNTY—		
J. E. Wallace, Colbert 5, c nw se, 14-14-14e	50	1008
OSAGE COUNTY—		
City of Pawhuska, 21, nwc sw, 25-26-8e	¶1	1134
Peters Pet. Co., 2, se sw nw, 26-25-9e	765	2177
Devonian Oil Co., 2, se ne ne, 331-21-10e	30	1534
Sand Springs Home, 109, c ne, 28-20-10e	¶1	2381
Phillips Pet. Co., 4, nw se se, 17-27-6e	*	3010
PAWNEE COUNTY—		
T. E. Mann et al, Sinnett 1, nec nw se, 22-20-9e	¶3	2139
PONTOTOC COUNTY—		
La. Oil Ref. Co., Reed 1, nec 18-5n-8e	600	2696
Perry 1, nec nw, 20-5n-8e	400	2570
McElroy 4, ne sw se, 17-5n-8e	250	2565
Homa Okla Oil Co., McCall 4, se sw nw, 17-5n-8e	250	2359
POTTAWATOMIE COUNTY—		
Magnolia Pet. Co., Billington 2, sec ne, 11-7-4e	65	3954
Atlantic Oil Prod. Co. et al, Milburn 1, ne nw nw, 15-7-e	¶46	3659
Wilcox O. & G. Co., Hollis 1, swc, 22-11-2e	*	5253
SEMINOLE COUNTY—		
Shaffer O. & R. Co., Clark 2, nw se sw, 1-9-5	475	4426
Gypsy, B. Carter 12, se nw nw, 11-9-5	990	4473
Barnsdall, Wasutke 4, sw ne sw, 12-9-5	310	4408
Roxana, Strothers 4, nwc se, 3-9-6	1420	4287
Magnolia, Vanbuskirk 1, se nw se, 9-8-6	575	4228
I. T. I. O. Co., Fay 7, ne se nw, 13-8-6	150	4275
Carter, Fish 3, ne nw sw, 36-8-6	65	4401
Snowden & McSweeney, Tiger 1, nwc, 13-7-6	100	4315
Superior Oil Corp., Varnum 2, se sw nw, 4-9-5	*	....
Producers & Refiners Corp., Dungan 2, sw nw se, 35-8-6	*	4511
STEPHENS COUNTY—		
Owen & Wood, Massey 7, cnl s½ se nw, 12-2s-8w	50	2100
Tom Medlin et al, Taliaferro 7 "B," sec sw, 27-1s-8w	135	1686
Carter, Isherwood 4, sw se se, 11-2n-5w	*	2515
Magnolia, Parker 1, nw ne sw, 8-1s-5w	*	3730
TULSA COUNTY—		
Transcontinental, Squire 2, cnl nw se, 8-16-14e	15	1976
WAGONER COUNTY—		
Boyd & Hanks, Pressley 1, nec sw nw, 7-18-15e	20	1320
Elk Drlg. Co., C. Barnett 3, nwc ne, 31-19-15e	*	1165

CALIFORNIA

Company, Well and Location	Initial Production Bbls.	Depth
DOMINGUEZ—		
Union Oil Co., Hellman 12	65	4240
KERN FRONT—		
Associated Oil Co., 35, 23-28-27	200	2200
LONG BEACH—		
Calif. Western Oil Co., E. W. 1	3100	5920
George W. Johnson, Taylor 1	3100	6020
Shell Co., Wilson 3	500	5205
MIDWAY—		
Standard, 35, 3-32-24	200	4260
51, 29-31-24	350	4485
RICHFIELD—		
Continental Oil Co., Pyne 6	350	4600
RINCON—		
Pan-American Pet. Co., Hobson Fee 3	975	2557
State 1	900	2800
SEAL BEACH—		
Associated Oil Co., Bryant 10	1300	5005
VENTURA—		
Associated, Lloyd 50	1000	6500

EASTERN STATES

PENNSYLVANIA

Company, Well and Location	Initial Production Bbls.	Depth
GREENE COUNTY—		
Nuss, McCloy & Co., Clutter 1	*	....
Ray 1	20	....
Dunn-Marr O. & G. Co., Null 1	¶2	....
E. R. Clovis & Co., Fordyce 2	¶2	....
Carnegie Nat. Gas Co., Baldwin 1	*	....

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
BOONE COUNTY—		
Owens Bottle Machine Co., Brown-Cochran 4	¶1½	....
Coal River Mining Co. 26	¶2	....
Peytona Coal & Land 14	¶¼	....
Little Land & Coal 8	¶¼	....
Godfrey L. Cabot, Federal Coal 21	¶¼	....
MARION COUNTY—		
Monroe & Laughlin, Tennant 1	¶2	....
Manufacturers Light & Heat Co., Eddy 1	¶2	....
Grimes 1	¶2	....
RITCHIE COUNTY—		
J. G. Cothran, Cothran 1	10	....
Hope Construction & Refg. Co., Jordan 4	3	....

The "Dickbelt"

THE ORIGINAL BALATA BELT is distinguished for the following important features:

GREAT STRENGTH AND DURABILITY The cotton duck, or textile portion of the belt, is made to private specifications of R. & J. Dick Company, and is of the very best grade and strongest weave obtainable. When this fabric portion is thoroughly impregnated, by means of a secret process, with a specially prepared solution, and the solutionized duck is folded into plies, it becomes a thoroughly welded and solidified unit, possessing the maximum of tensile strength and durability.

PERFECT UNIFORMITY THROUGHOUT The absolute uniformity of the "DICKBELT" is insured by the mechanically perfect conditions under which it is manufactured.

COMPLETE IMMUNITY TO WATER AND STEAM The solutionizing of the cotton duck renders it impervious to the action of water, steam, damp, or changes of temperature. The "DICKBELT" will run under water or through steam without ill effects.

STRONG GRIPPING POWER AND LACK OF STRETCH If the belt is of suitable strength for the work to be performed, the "DICKBELT" will transmit without loss the full power given off by the engine or motor, and having been stretched at the factory will not stretch. Should the belt become dry and smooth, a few drops of castor oil on one of the pulleys will restore the proper condition of working face.

Distributed by

Republic Supply Company

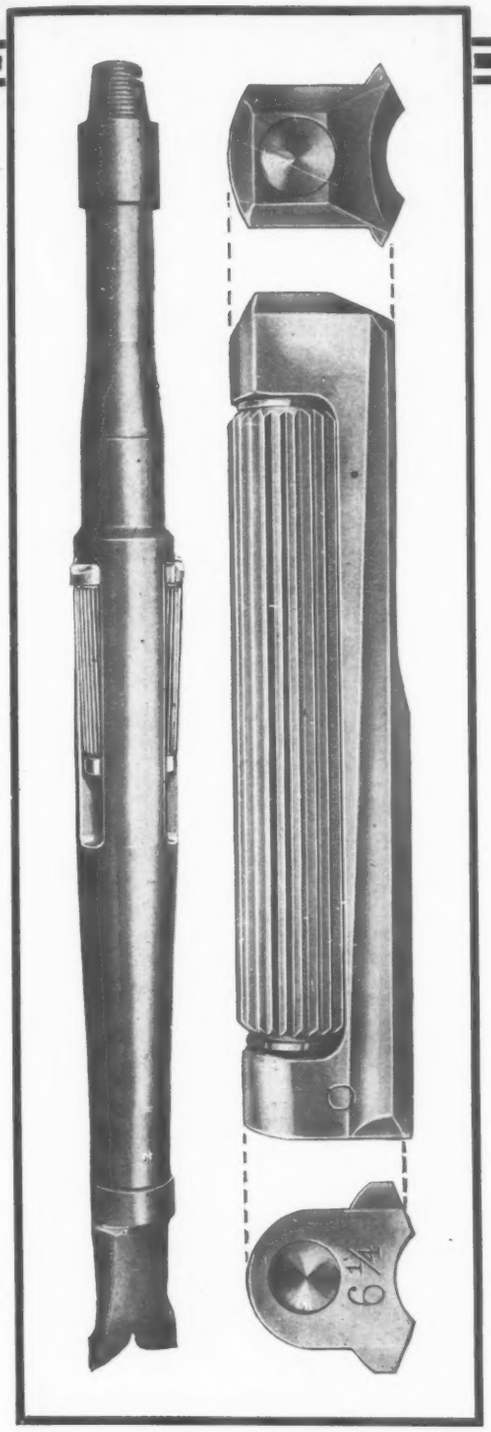
GENERAL OFFICES - HOUSTON, TEXAS

OIL AND GAS WELL SUPPLIES

ROTARY AND CABLE TOOLS

Company, Well and Location	Initial Production Bbls.	Depth
ROANE COUNTY—		
Clifton O. & G. Co., Cummings 2	3	....
Godfrey L. Cabot, Rush 1	¶1	....
LOGAN COUNTY—		
Wacatock Producing Co., Dingess Coal Co. 22	¶¼	....
Dingess Coal Co. 24	¶½	....
MARSHALL COUNTY—		
Manufacturers Light & Heat Co., Frey 2	¶2	....
S. B. McCracken & Co., Rush 1	*	....
PLEASANTS COUNTY—		
Sharp Farm Oil Co., Sharp 1	*	....
WETZEL COUNTY—		
Pittsburg & W. Va. Gas Co., Lewis 3	¶1¼	....
CALHOUN COUNTY—		
W. H. Bickel, Wolverton 4	*	....
KENTUCKY		
ESTILL COUNTY—		
Superior Oil Corp., Miller 6	*	....
Waco Oil Co., Rawlins 17	2	....
JOHNSON-MAGOFFIN COUNTIES—		
B. F. Oil Synd., May 2	*	....
Hamlin, Tanner & Co., Tacket 2	5	....
FLOYD-KNOTT COUNTIES—		
Martin O. & G. Co., Allen 1	¶2	....
Ivyton O. & G. Co., Martin 1	¶2	....
WARREN COUNTY—		
Miami O. & G. Co., Lowe 8	2	1234
ALLEN COUNTY—		
Mid-Southern Oil Co., Woods 19	*	375
DAVIESS COUNTY—		
The Ohio Oil Co., Roby 2	50	....
R. P. Rowe & Co., Poor Farm 3	*	....
Thompson & Tremor, Coomes 1	*	....
OHIO COUNTY—		
Young & Lee, Ozell 2	125	739
Daugherty & Co., Rhodes 5	125	760
Creek Drilling Co., Bartlett Hrs 3	125	796
Wood Oil Co., Inc., Ralph 3	75	453
Wallace 1	*	....
Leeper Oil Co., Sharp 1	*	....
The Ohio Oil Co., Harrison 3	5	....
S. H. Russell & Co., Rhodes 1	10	440
Jim C. Ellis, Roberts 1	*	....
White Plains O. & G. Co., Kelly 2	1	435
Marvin, Johnson & Co., Westerfield 1	*	....
SOUTHEASTERN OHIO		
WASHINGTON COUNTY—		
Burton & Co., Vanway 1	*	....
Yellowstone O. & G. Co., Lisk 2	3	....
Bowersock & Co., Barnard 1	*	....
MONROE COUNTY—		
Shay & McMullen, Stoffle 3	3	....
NOBLE COUNTY—		
Ohio Fuel Gas Co., Harding 1	¶1¼	....
CENTRAL OHIO		
CUYAHOGA COUNTY—		
Ohio Public Service Co., Ashley 2	¶½	....
Arthur & Simpson, Crawford 1	¶1	....
Hulse & Kundtz, Standen 2	¶1¼	....
Foster & Foster, Camp 2	*	....
J. B. Harrison & Co., Beranek 1	¶2	....
MEIGS COUNTY—		
Pure Oil Co., Mitchell 1	4	....
Ohio Fuel Supply Co., Webster 1	¶¼	....
ATHENS COUNTY—		
Wehrle Interests, Allen 1	2	....
Cook & Co., Shell Woodyard 4	*	....
GUERNSEY COUNTY—		
Pure Oil Co., Ridgley 3	40	....
HOCKING COUNTY—		
Kachelmacher Estate, Tracy 27	10	....
LICKING COUNTY—		
George H. Long, Dwiggins 3	5	....
LORAIN COUNTY—		
Ohio Fuel Gas Co., Howard 1	¶½	....
WAYNE COUNTY—		
B. B. Cameron, McFadden 1	¶1½	....
COSHOCTON COUNTY—		
Mill Creek Oil Co., Arnold 8	¶2	....
ASHLAND COUNTY—		
Logan Gas Co., Markel 1	*	....
KNOX COUNTY—		
Upham Gas Co., Adrian 1	*	....
HOLMES COUNTY—		
Ohio Fuel Supply Co., Moser 1	*	....
MUSKINGUM COUNTY—		
Shankland Bros., Meeks Hrs 1	*	....
NORTHWESTERN OHIO		
ALLEN COUNTY—		
Real Oil Co., Wierville 2	50	....
George Helmkamp, Agent, Vore 5	35	....
WOOD COUNTY—		
Lewis Hille, Hille 3	10	....
George L. Haubert & Co., Smith 4	5	1290
AUGLAIZE COUNTY—		
John Fox & Co., Howisher 1	*	1235
INDIANA		
DAVIESS COUNTY—		
Home Oil Co., Emmerick 1	*	1650
PIKE COUNTY—		
The Ohio Oil Co., Coffman 10	*	970
JAY COUNTY—		
Say & Co., Heller 1	*	....
ILLINOIS		
CRAWFORD COUNTY—		
Dinsmoor Oil Co., Dewey 10	*	....
John Phipps, Reaville 1	1	954
WABASH COUNTY—		
Breen Oil Co., Stillwell 2	*	....
Karns & Co., Jordan 2	*	....
ARKANSAS		
OUACHITA COUNTY—		
Brewer et al, Curry 1, 32-15-19	5	2201
Standard, Umsted 5, 32-15-15	¶2	2669
UNION COUNTY—		
Garrett-Modisette Dr. Co., Gregory 1, 10-17-14	50	2765
Ohio Oil Co., Crain 3, 1-17-14	30	2996
LOUISIANA		
BOSSIER PARISH—		
Palmer Corp., Louis Burk 1, 27-17-12	¶1½	1707
CADDO PARISH—		
W. D. Chew, Fee 7, 33-21-16	30	1868
Gulf, Herndon 10, 15-21-15	32	3921
The Texas Co., C. M. L. 51, 23-21-15	50	3942
DE SOTO PARISH—		
J. H. Askew, Richardson 2, 25-13-11	53	2550
OUACHITA PARISH—		
Imperial O. & G. Co., Tubbs 3, 13-19-3e	¶5	2190
Ouachita Nat. Gas Co., D'Arbonne A-2, 34-19-3e	¶2½	2212
Smith 7, 38-20-4e	¶34	2137
SABINE PARISH—		
Ark. Fuel Oil Co., Logan A-1, 23-10-13	10	2300
SOUTH LOUISIANA		
EDGERLY—		
C. M. Crotty, Lillard 7	7	2375
EVANGELINE—		
Port City Oil Co., S. F. S. 6	75	1825
LOCKPORT—		
Vacuum-Gulf, Miller 19	200	3225
Farquhar et al A-5	*	5650
TEXAS		
TEXAS GULF COAST		
BATSON—		
Capitol Oil Co., Hodges 9	250	3900
BARBERS HILL—		
Humble, Myers Fee 5	100	3275
BLUE RIDGE—		
H. R. Cullen, Blakely 1	800	3880
HULL—		
The Texas Co., Hannah Fee 2	37	3100
PIERCE JUNCTION—		
Sun Co., Fitzsimmons 1	45	4600
ORANGE—		
Texhoma Oil Co., Chesson 13	150	3425
SARATOGA—		
Regina Oil Co., Teel 2	*	1550
SOUR LAKE—		
Lake Graham Oil Co., Bashara 16	70	2110
Theis Oil Co., Merchant 5	140	2350
EAST TEXAS		
HARRISON COUNTY—		
Simms Oil Co., Pollard 1, James Short sur	¶3½	1029
A. L. Waller, Bryson 3, W. A. Anderson sur	¶3	980
PANOLA COUNTY—		
Bethany O. & G. Co., Burns 3, W. A. Birdsong sur	¶4	1015
Magnolia, Steele 13, B. C. Jordan sur	¶1½	996
Trosper 3, J. Shandoin sur	¶6	1023
TEXAS PANHANDLE		
CARSON COUNTY—		
The Texas Co., Chas. Kalka 1	¶37	2533
GRAY COUNTY—		
Danciger O. & R. Co. et al, Jackson 4	250	3034
Gibson Oil Corp., Bowers 2-A	850	3178
Mid-West Explo. Co., Bowers 1	810	3055
HUTCHINSON COUNTY—		
Phillips Pet. Co. & White Eagle Oil & Ref. Co., Lee Bivins 1	200	3001
LAMB COUNTY—		
Tolbert & Simms et al, Ellwood 1	*	1505
CENTRAL WEST TEXAS		
BROWN COUNTY—		
Amerada Pet. Corp., Gilbreath 4	35	1344
Cranfill-Reynolds, DeBusk 1-B	*	1408
Daniels et al, Allcorn 1	115	1137
Ditto Oil Interests, Taylor 1	*	1485
Dozier et al, Cason 1	*	1605
Gilman-McMurray et al, Hickman 1	*	1307
Hammon & Garrett, Allen 1	*	1340
Humphreys Bros., Beasley 1	*	1472
Lamb et al, Gwathney 2	*	1501
Massey et al, Stewart 1	*	1685
Philips Pet. Co., Newsome 10	†	1275
Warren Dev. Co., Fannie Allcorn 1	*	1771
Wheelock-Collins, Smith 7	35	1336
COLEMAN COUNTY—		
Chestnut-Smith, Eastland Oil Co., Morris 2	320	2104
EASTLAND COUNTY—		
Cisco Falls Oil Co., Rumph 1	*	1590
Mays et al, Nivers 1	40	1419
Ed. V. Parson et al, Blackwell 3	¶8-600	3001
McCULLOCH COUNTY—		
Brown-Shore et al, Shelton 1	*	1252
Ragsdale et al, Dutton 2	*	650
Wakefield et al, Dutton 2	*	815
SHACKELFORD COUNTY—		
Evans et al, King 1	50	1643
Thomas et al, Herron 1	*	1175
Wylie et al, Matthews 3	10	1158
PALO PINTO COUNTY—		
Camp Oil & Gas Co., Costello 1	*	2313
Clements et al, Broomfield 1	*	1303
STEPHENS COUNTY—		
Clark et al, Riddle 3	30	1880
Lyman et al, Curry 1	¶¼	3180
Mook-Texas Oil Co., Riddle 4	*	2200
Texas Consolidated Oil Co., Martin-Walker 10	10	3967
T. & P. Coal & Oil Co., Pierce 6	*	1803
Thompson et al, Riddle 1	*	2250
NORTH TEXAS		
ARCHER COUNTY—		
Burns & The Texas Co., Burns 2-B	*	1555
J. P. Rayzor et al, Ebnother 1	*	1559
Roberts Oil Corp., Garvey 4	*	915
Rose et al, Garvey 1	*	904
Morrison 1	*	1535
Seabury & Brand, Perkins 2	10	549
Shappel Oil Co., Wilson 17-B	15	902
Wilson et al, Farmer 3	75	1530
ELECTRA—		
Electra Prod. Co., Burnett 6	15	1591
W. H. Hammon et al, McCarty 2-C	5	244
McCarty 4-C	5	243
McCarty 5-C	2	236
FANNIN COUNTY—		
Honey Grove O. & G. Co., Broadfoot 1	*	2990
FOARD COUNTY—		
The Texas Co., Watkins 1	*	3720
JACK COUNTY—		
Buttram Pet. Co., Jones 6	30	1974
K-M-A AND IOWA PARK—		
Vergate Oil Co., Watkins 1	75	1780
MONTAGUE COUNTY—		
Bridwell-Heydrick, Cunningham 1	*	1651
Salmon 2-C	*	915
Continental Oil Co., Maddox 25-A	50	930
Chapman et al, Bybee 1	*	2300
THROCKMORTON COUNTY—		
Associated Pet. Co., Cummings 4	*	3065
Parker et al, Matthews 4	*	1664
WILBARGER COUNTY—		
Phillips Pet. Co., Waggoner 2-C	15	1934
Waggoner 1-MM	60	2390
YOUNG COUNTY—		
Harry Hines et al, Gregg 1	*	652
Roberts Oil Corp., Stewart 1-A	*	897
Smor Oil Co., Robertson 1	*	2450

(Continued on page 84)



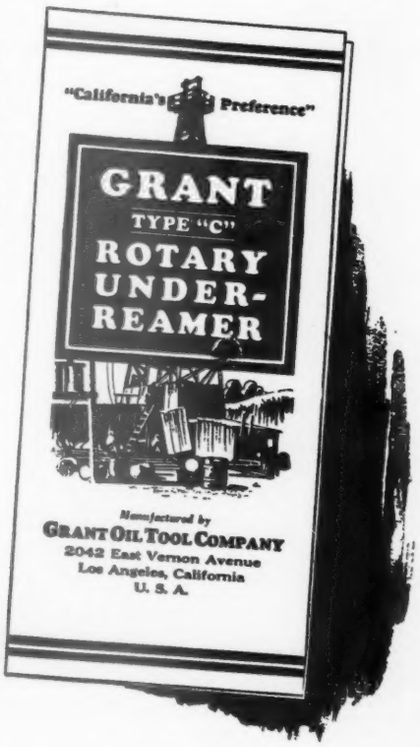
The GRANT
Type "C" ROTARY UNDERREAMER
—greater cutting edge!

THE outstanding feature of the Type "C" Underreamer is the fact that it has more cutting edge than any other make of roller underreamer. Every inch of the roller does effective cutting—not just the upper half as is the case in ordinary underreamers. The cutters cannot fall out nor can they become twisted or bent to a point where they do not cut. The cutter assembly is extremely easy to change. GRANT Underreamers **underream,** and no cutters or parts have ever been lost in a hole. No other underreamer has a record like this.

Remember, the Type "C" is just one of the varied line of GRANT Underreamers. We can give you any type and style you desire. Let us solve your underreamer problems.

Send for this pamphlet

Your underreamer file will not be complete until you have this illustrated pamphlet giving details of the GRANT Type "C" Underreamer. Write, wire or phone for it TODAY! Also, we will gladly forward the Grant 1928 Calendar to you with our compliments, upon request.



GRANT OIL TOOL CO.

"UNDERREAMER HEADQUARTERS"

2042 EAST VERNON AVENUE
LOS ANGELES, CALIFORNIA

Phone: Axridge 7271

CRUDE OIL PRICE QUOTATIONS

CURRENT POSTINGS

EASTERN STATES

	Jan.10 1928
New York Transit	$2.65
Bradford District	2.65
National Transit	2.55
Southwest	2.55
Eureka	2.50
Buckeye	2.25
Macksburg	2.80
Gaines	2.60
Somerset	1.50
Cabell	1.40
Ragland	.95
Corning, 35-cent grade	1.45
Corning, 25-cent grade	1.35
Keister	1.10

CENTRAL STATES

Illinois	1.60
Indiana	1.48
Lima	1.71
Plymouth	1.33
Princeton	1.60
Waterloo	1.18
Wooster	1.57

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, All grades 1.50

MID-CONTINENT

Prairie, Sinclair, Gulf, Texas and Magnolia*

	Jan.10 1928
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gracity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60

*Magnolia's price for below 30 gravity is $1.05. Magnolia's price on Glasscock County crude is 80 cents per barrel, flat, and is also 80 cents on all crude in Howard County that comes from section 136, block 29 W & NW Railway Survey.

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Currie, Moran, Nocona and Lytton Springs crude.

Humble O. & R. Co. and Texas Co.*

	Jan.10 1928
Below 25 gravity	.90
25 to 25.9 gravity	1.06
26 to 26.9 gravity	1.08
27 to 27.9 gravity	1.10
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.0 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gravity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60

Corsicana Heavy, $1.00 per barrel, posted by Magnolia.

*The Texas Company's Postings begin at 28 to 28.9.

SOUTH TEXAS

Mirando	1.00

SOMERSET

Grayburg

	Jan.10 1928
Below 33 gravity	1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 and above	1.17

GULF COAST

	Jan.10 1928
Grade "A" all companies	1.20
Gulf Coast Light Oil, below 25	1.15
25 to 25.9 gravity	1.17
26 to 26.9 gravity	1.19
27 to 27.9 gravity	1.21
28 to 28.9 gravity	1.23
29 to 29.9 gravity	1.25
30 to 30.9 gravity	1.27
31 to 31.9 gravity	1.29
32 to 32.9 gravity	1.31
33 to 33.9 gravity	1.33
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.37
36 to 36.9 gravity	1.39
37 to 37.9 gravity	1.41
38 to 38.9 gravity	1.43
39 to 39.9 gravity	1.45
40 and above	1.47

*Humble Oil & Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crudes above 35 to $1.37 per barrel.

Magnolia Petroleum Company's postings stop at 31 to 31.9.

CALIFORNIA CRUDE OIL PRICES AT THE WELL

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated.)

Gravity (degrees)	Signal Hill	Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Torrance	Richfield	Whittier La Harbra		Coyotte Hill	Santa Fee Springs	Newhall McKittrick Kern River	Midway Sunset Elk Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler
14-14-9	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
16-16-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
17-17-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
18-18-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
19-19-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
20-20-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	..	.77	.77	.77	.76	.76
21-21-9	.86	.86	.86	.86	.86	..	.86	.86	.85	.85	.86	.85	..	.79	.79	.79	.77	.77
22-22-9	.87	.87	.87	.87	.87	..	.87	.87	.85	.85	.87	.85	..	.81	.81	.81	.78	.78
23-23-9	.88	.88	.88	.88	.88	..	.88	.88	..	.85	.88	.85	..	.83	.83	.83	.79	.79
24-24-9	.89	.89	.89	.89	.89	..	.89	.89	..	.85	.89	.85	..	.85	.85	.85	.80	.80
25-25-9	.90	.90	.90	.90	.90	.90	.90	.90	..	.86	.90	.86	..	.87	.87	.87	.81	.81
26-26-9	.92	.92	.92	.92	.92	.92	.92	.92	..	.87	.91	.87	..	.89	.89	.89	.83	.82
27-27-9	.94	.94	.94	.94	.94	.94	.94	.94	..	.88	.92	.88	..	.91	.91	.91	.85	.83
28-28-9	.96	.96	.96	.96	.96	.96	.96	.96	..	.89	.93	.89	..	.93	.93	.93	.87	..
29-29-9	.98	.98	.98	..	.98	.98	..	1.00	..	.91	.95	.93	..	.99	.99	.99	.91	..
30-30-9	1.00	1.00	1.00	..	1.00	1.00	..	..	..	..	..	.95	..	1.02	1.02	1.02	.93	..
31-31-9	1.03	1.03	1.03	..	..	1.03	..	..	..	..	..	.97	..	1.05	1.05	1.05	.95	..
32-32-9	1.06	1.06	1.06	..	..	1.06	..	..	..	..	..	.99	..	1.08	1.08	1.08	.97	..
33-33-9	..	..	..	..	..	1.09	..	..	..	..	..	1.01	..	..	..	1.11	.99	..
34-34-9	..	..	..	..	..	1.12	..	..	..	..	..	1.03	..	..	..	..	1.01	..
35-35-9	..	..	..	..	..	1.15	..	..	..	..	..	1.06	..	..	..	..	..	..
36-36-9	..	..	..	..	..	1.18	..	..	..	..	..	1.09	..	..	..	..	..	..
37-37-9	..	..	..	..	..	1.21	..	..	..	..	..	1.12	..	..	..	..	..	..
38-38-9	..	..	..	..	..	1.24	..	..	..	..	..	1.15	..	..	..	..	..	..
39-39-9	..	..	..	..	..	1.27	..	..	..	..	..	..	..	..	..	..	..	..
40-40-9	..	..	..	..	..	1.30	..	..	..	..	..	..	..	.	..	..	..	.
41-41-9	..	..	..	..	..	1.33	..	..	..	..	..	..	..	.	.	..	..	.
42-42-9	..	..	..	..	..	1.36	..											

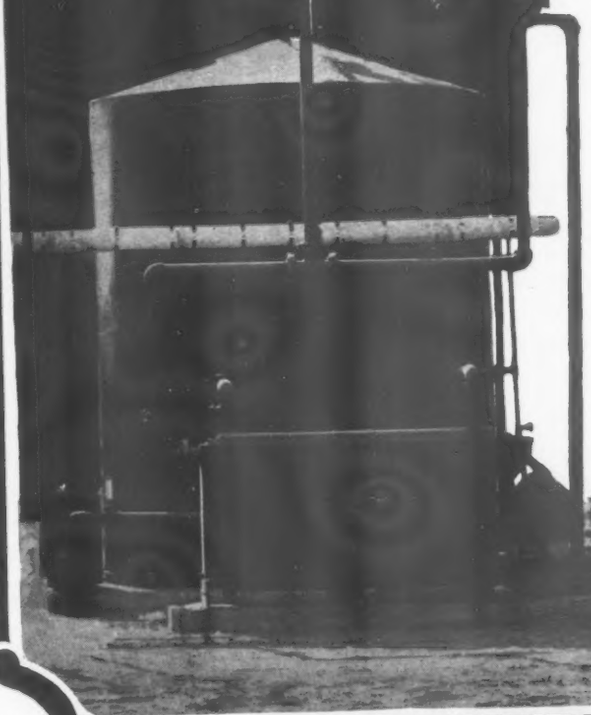
"PETRECO"

You know the pipeline deduction for the emulsified content of your crude—you know what percentage of your total production runs "wet," and you know what it means in dollars and cents—you know the hole it makes in profits—in annual dividends!

—but do you know "Petreco?"—the electrical process for the dehydration of crude oil emulsions—the economical, fool proof and dependable process for taking "cut oil" out of the "red" and putting it on the profit side of the ledger?

If not, why not—write for the facts today, and take your "cut" production into partnership in the creation and perpetuation of legitimate profits.

The story is told in "The Electrical Process for the Dehydration of Crude Oil Emulsions" which will be mailed on request. No obligation at all.



PETROLEUM RECTIFYING COMPANY of CALIFORNIA

Security Title Insurance Bldg. 530 West 6th Street, Los Angeles, Calif.

Petroleum Bldg. Houston, Texas

Say you saw it in The OIL WEEKLY

	Jan.10 1928
MARKHAM	
The Texas Company	
All grades	1.00
LULING	
All grades	1.00
PANHANDLE	
(Humble Oil & Refining Company and Magnolia Petroleum Company, Gulf Pipe Line Company and Kay County Gas Company)*	
Hutchinson, Carson and Wheeler counties, all grades	.75
*Gulf and Kay County do not post in Wheeler County.	
Gray County	
(Humble Oil & Refining Company)	
28 to 28.9 gravity	.80
29 to 29.9 gravity	.82
30 to 30.9 gravity	.84
31 to 31.9 gravity	.86
32 to 32.9 gravity	.88
33 to 33.9 gravity	.90
34 to 34.9 gravity	.92
35 to 35.9 gravity	.94
36 to 36.9 gravity	.96
37 to 37.9 gravity	.98
38 to 38.9 gravity	1.00
39 to 39.9 gravity	1.02
40 to 40.9 gravity	1.04
41 to 41.9 gravity	1.06
42 to 42.9 gravity	1.08
43 to 43.9 gravity	1.10
44 and above	1.12
(Humble Oil & Refining Company)	
Crane, Upton, Crockett and Pecos counties, all grades	.60
WEST TEXAS	
(Humble, Gulf, Magnolia, Kay County Gas Company and Southern Crude Oil Purchasing Company)*	
Crane, Crockett, Pecos, Upton and Winkler, Counties	.60
*Kay County Gas Company does not buy in Winkler and Pecos Counties, and Southern does not buy in Pecos or Crockett.	
Col-Tex Refining Company	
Mitchell County	$ .93
WYOMING-MONTANA	
Wyoming	
Byron	1.33
Ferris	1.60
Elk Basin	1.33
Grass Creek	1.33
Rock Creek	1.25
Lost Soldier	.95
Lance Creek	1.33
Mule Creek	1.10
Notches	.65
Big Muddy	1.25
Osage	1.33
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	1.33
Lander	.80
Simpson Ridge	.80
Rex Lake	1.10
South Casper Creek-Poison Spider	1.00
Salt Creek	
Midwest Refining Company	
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 and above	1.30
MONTANA	
Sunburst	1.35
Cat Creek	1.33
Lake Basin	2.20
NEW MEXICO	
Artesia	1.00
Hogback	1.38

	Jan.10 1928
CANADA	
Oil Springs	2.18
Petrolia	2.11
*Bounty on Canadian crude is ¼-cent per gallon, or 26¼ cents per barrel.	
LOUISIANA-ARKANSAS	
(Standard of Louisiana, Louisiana Oil Refining Company, Gulf Refining Company of Louisiana and The Texas Co.) Homer, Haynesville, Caddo, El Dorado, De Soto and Chrichton.	
Below 28 gravity	1.10
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gravity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60
Atlantic Oil Producing Company posts this same schedule on Homer, Haynesville, and West El Dorado.	
Magnolia Petroleum Company has the same posting on Pine Island, Haynesville, Eldorado and Bull Bayou.	
STEPHENS	
(All Companies)	
Below 28	1.00
28 to 28.9 gravity	1.04
29 to 29.9 gravity	1.04
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.08
32 and above	1.10
SMACKOVER	
(All Companies)	
Below 24 gravity	$ .85
24 and above	1.00
Bellevue	1.25
Jennings	1.15
Vinton	1.30
Edgerly	1.30
Starks Dome	1.30
Urania	.75
Cotton Valley	.85
Calion	.85

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

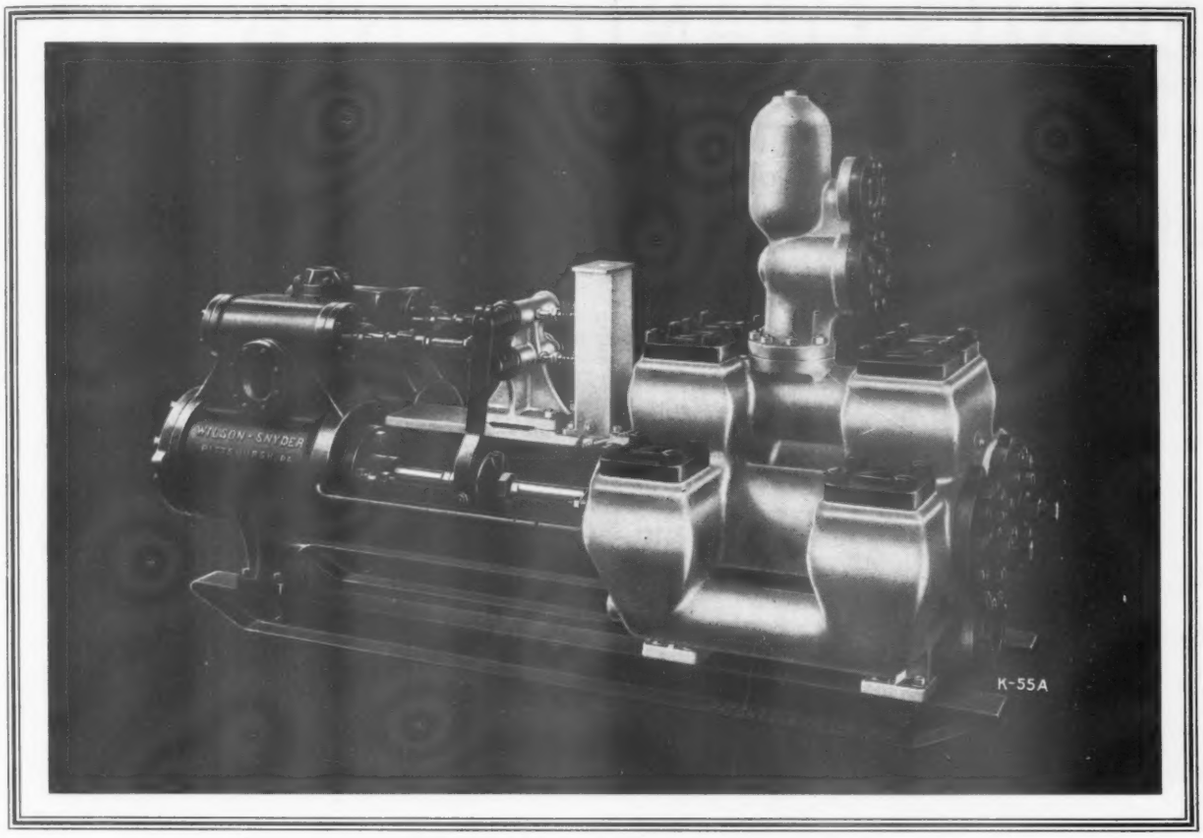
	December 31	December 24
AT ATLANTIC COAST PORTS		
Baltimore	75,000	485,000
Boston	.....	74,000
New York	385,000	*896,000
Philadelphia	75,000	181,000
Others	140,000	250,000
Total	675,000	1,886,000
Daily Average	96,429	269,429
AT GULF COAST PORTS		
Galveston District	.....	.....
New Orleans and Baton Rouge	40,000	191,000
Port Arthur and Sabine District	.....	.....
Tampa	.....	15,000
Total	40,000	206,000
Daily Averages	5,714	29,429
AT ALL UNITED STATES PORTS		
Total	715,000	2,092,000
Daily Average	102,143	298,858
Daily Average Four Weeks Ended	186,964	216,071

RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

	December 31	December 24
AT ATLANTIC COAST PORTS		
Baltimore	.....	*133,000
Boston	.....	.....
New York	233,000	72,000
Philadelphia	235,000	*311,000
Others	93,000	61,000
Total	561,000	577,000
Daily Average	80,143	82,429
AT GULF COAST PORTS	.....	20,000
Daily Average	.....	2,857
Total Atlantic and Gulf Coast Ports	561,000	597,000
Daily Average	80,143	85,286
Daily Average Four Weeks Ended	87,571	86,571
DISTRIBUTION OF TOTAL CALIFORNIA RECEIPTS IS AS FOLLOWS:		
Crude	159,000	151,000
Gasoline	255,000	446,000
Gas Oil	74,000	.....
Kerosene	73,000	.....
Total	561,000	597,000

*Revised



Our No. 18 set a new mark—*the first Slush Pump with*

Long Stroke—
Piston Steam Valves
—Direct Flow

It will pay you to see one operating

WILSON-SNYDER
BUILDERS OF HEAVY DUTY PUMPS FOR OVER FIFTY YEARS
PITTSBURGH, PA U.S.A.

Say you saw it in The OIL WEEKLY

PERMITS GRANTED FOR NEW WELLS

WEEKLY COMPARISON OF NEW WELLS

Following is a condensed table giving a comparison of permits or locations made for new wells during the past year in Kansas, Oklahoma, Arkansas, Louisiana, Texas, California and the Mountain States:

	Week ending Jan. 7	Previous week	Total this month	Total this year	This week last year	This month last year	Total same date last year	1927 year total
Arkansas	3	4	3	3	7	7	7	329
California	24	25	24	24	16	16	16	1,226
Louisiana	8	7	8	8	14	14	14	812
Kansas	18	28	18	18	16	16	16	972
Oklahoma	43	71	43	43	63	63	63	3,703
Texas	97	105	97	97	174	174	174	8,665
Mountain States	..	..	..	..	8	8	8	494
Totals	193	240	193	193	298	298	298	16,149

ARKANSAS

CLARK COUNTY — McKenzie Oil Co., Eaken 1, 9-11-19, 325 ft n and 325 ft e of sw c sw nw.

OUACHITA COUNTY—H. M. Harrell Tr.'s, Ponder 1, 18-12-7, 338 ft n and 391 ft w of se c se se.

UNION COUNTY — L. M. Vaughan Tr.'s, Ezell 2, 12-17-15, 250 ft e and 200 ft n of sw c ne se.

LOUISIANA

BOSSIER PARISH — Ellis & Markley, Shreveport, Hunter 5, 14-16n-12w, 600 ft n and 900 ft n and 900 ft w of se c. The Palmer Corp., Shreveport, Roberson 1, 26-23n-12w, 660 ft s and 660 ft w of ne c nw ne. The Texas Co., Shreveport, Peyton 1, 30-23n-11w, 660 ft n and 330 ft e of sw c; Wilkinson 2, 36-23n-12w, 660 ft due w of center.

CADDO PARISH — Standard, Shreveport, Hart 17, 34-21n-16w, 145 ft s and 694 ft w of ne c nw.

CALCASIEU PARISH — Gulf, Houston, Star-Vincent 44, 34-10s-12w, approx 948 ft s and 530 ft e of nw c sw.

IBERIA PARISH—Louisiana Land & Exploration Co., Houston, Avery Planting & Improvement Co. 1, 25-13s-5e, 5458 ft e and 7699 ft s of nw cor of sec.

TERREBONNE PARISH—Southern Gas Co., Inc., Southdown 4, 103-17s-17e, n 77 degrees 58 ft w 58.69 chains from ne c.

CALIFORNIA

CAT CANYON—R. & G. Oil Co., 1, 32-9-32.

HUNTINGTON BEACH — J. F. Garliepp, Andrews 2, 10-6-11.

KERN FRONT—Bishop Corp., 5, 23-28-27.

LONG BEACH—Miley Oil Co., Miley-Dabney 1, 30-4-12. Graham-Loftus Oil Co., Mack 1, 19-4-12. California Eastern Oil Co., Paulsen 1, 29-4-12. George F. and Paul Getty, L. B. 21, 19-4-12; L. B. 22, 19-4-12; L. B. 23, 19-4-12; L. B. 24, 20-4-12. California Western Oil Co., Darby 3, 19-4-12; Darby 4, 19-4-12. Pan American Pet. Co., McKeon 3, 29-4-12. A. T. Jergins Synd., 3, 29-4-12.

MIDWAY—Honolulu Consolidated Oil Co., 8-32-24.

RINCON — Chanslor-Canfield Midway Oil Co., Hobson C-4, 17-3-24. Southern Pacific Land Co., 1, 17-3-24.

SAN BERNARDINO COUNTY — L. B. Riggins, 1, 6-3-7.

SONOMA COUNTY—Shell Co., Mossi 1, ..-5-7.

TEMBLOR—Exeter Oil Co., Parry 1, 1-29-20.

VENTURA—Petroleum Securities Co., Orton 7, 28-3-23. Associated Oil Co., Lloyd 52, 27-3-23; V. L. & W. 5, 26-3-23.

VENTURA COUNTY — Standard Oil Co., Saticoy-Citrus 2, 15-2-22.

OKLAHOMA

CADDO COUNTY — English Drlg. Co., Cutshall 3, nw c se, 5-5n-9w. Moran et al, Cutshall 2, se c nw, 5-5n-9w.

CARTER COUNTY — Roxana Pet. Corp., Carter 1, se sw sw, 14-1s,3w.

COMANCHE COUNTY — Jolly-Ogg Oil Co., Sparlin 1, se c ne, 24-3n-10w.

CREEK COUNTY—Indep. O&G Co., Wolfe 9, sw nw ne, 18-14-10e; Wolfe 8, nw sw ne, 18-14-10e. O. M. Irelan et al, Inman 3, se c sw sw sw, 9-17-11e. Devonian Oil Co., Hawkins 2, sw c ne, 4-18-12e. J. H. Markham et al, Beesley 1A, ne c 19-17-7e.

GARFIELD COUNTY—Sinclair O&G Co., Metcher 18, ne c nw se ne, 36-22-4w.

GRADY COUNTY — Little Nick Oil Co., McCaughtry 3, se nw nw 35-5n-8w. Noble & Westerfelt, McCaughtry 5, se ne nw, 35-5n-8w.

HUGHES COUNTY—Whitney et al, Moore 1, sec sw, 17-5n-9e.

KAY COUNTY—Harris & Haun, Austin 1, c se ne 17-29-1w.

MUSKOGEE COUNTY — E. J. Lambert, Hutton 1, ne c sw 22-13-15e. W. A. Peterson, James 7, c s 1 sw se se 18-14-17e. Decius & Garrett, Marshall 1, nw c se, 27-14-16e.

OKMULGEE COUNTY — C. T. Smith, Rentie 10, ne c se sw 18-14-15e. J. W. Sharpe et al, Colbert 5, se c nw, 16-14-14e.

OSAGE COUNTY—Delmar Oil Co. 1, c nw, 22-24-8e. Lewis Gas Products Co. 4, sw c 2-26-6e; 1, nw c sw 2-26-6e; 2, sw c nw sw 2-26-6e; 3, nw sw sw 2-26-6e. Gypsy Oil Co. 9, sw ne se 28-27-6e; 10, se nw se 28-27-6e. Kewanee O & G Co. 7, ne nw ne, 28-27-6e; 8, sw nw ne, 28-27-6e; 9, se nw ne 28-27-6e; 10, nw sw ne 28-27-6e. Phillips Pet. Co. 6, se sw se 17-27-6e; 7, nw c se 17-27-6e.

PAWNEE COUNTY—B. Swift Pounder 1, nw c sw nw 33-20-9e.

PONTOTOC COUNTY—Texas Pacific Coal & Oil Co., Hutcheson 2, se c 19-5n-8e.

SEMINOLE COUNTY—Barnsdall Oil Corp., Sango 6, nw sw nw 1-9-5. Twin State Oil Co., Swartz 1, se c 10-9-7. Magnolia Pet. Co., Cruse 2, sw se se 2-7-6e. Gypsy Oil Co., Renton 1, nw ne ne 11-7-6e. Shaffer O&R Co., Isaacs 1, ne c sw 13-5n-5e. La. Oil Ref. Co., Reed 3, sw c se ne ne 18-5n-8e.

SEQUOYAH COUNTY — Citizens Gas Co., Packard 1, se c ne 7-11-27e.

STEPHENS COUNTY — Beard & Cobb, Wade 2, se c sw nw ne, 11-2s, 8w.

TULSA COUNTY — Enfisco Oil Corp., Bruner 1, c e½ ne 14-17-13e.

KANSAS

BUTLER COUNTY — Empire O&R Co., Sterling 1, se c nw se 22-27-5e.

CHATAUQUA COUNTY—Griffith, Bell et al's Julian 1, ne c se 2-32-10e.

COWLEY COUNTY — J. A. Hull, Detmer 11, sw c ne sw 24-32-4e. White Oil Co., White 1, sw c ne, 4-33-4e. Harris & Haun, Dickey 1, c nw 17-35-3e. Boylan 1, c ne 18-35-3e.

ELK COUNTY—Denton Bros., Denton 1, se c ne 4-30-9e.

GREENWOOD COUNTY — Polhamus et al, Holverson 2, se c sw ne, 26-24-9e. Powell et al, Smith 1, sw c nw 8-24-11e. Smith & Rockhill, McNair 1, nw c se, 20-26-12e.

SUMNER COUNTY — Roxana Pet. Corp., River Bed 9, se c ne nw 36-31-2e; Work 1, sw c se 11-32-2e; Rothwell 2, sw c ne sw 14-32-2e; Wasson et al, Gassoway 4, sw c se sw 14-32-2e. Palmer & Barnsdall Oil Corp., Wenrich 2, nw c ne ne nw, 23-32-2e. Roxana Pet. Corp., Miller 1, nw c ne 23-32-2e. Meridian Gas Co., Bowers 1, sw c 8-35-1e.

TEXAS

ARCHER COUNTY—F. P. Rose, Wichita Falls, Garvey 1, 1854, TE&L sur, 150 ft from n and w lines. Perkins, Cullum & Continental Oil Co., Wichita Falls, Wilson 7, blk 114 Amer. Trib. sur, 300 ft e of 4. Simms & Consolidated Oil Co., Wichita Falls, Turbeville 1, R. Carson sur, 150 ft from n and w lines. Simms Oil Co., Dallas, Turbeville A 21, blk 73, R. Carson sur, 330 ft from n and 990 ft from w line. Golding & Cochran, Wichita Falls, Prideaux A 15, J. Dorsey sur.

BROWN COUNTY—Pandem Oil Co., Wichita Falls, Curry B 1, No. 637, E. L. Betts sur, 150 ft from n and w lines. M. L. Richards, Wichita Falls, Curry 1, No. 637, E. L. Betts sur, 150 ft from s and w lines. A. B. Baker, Jr., Wichita Falls, Brooke 1, No. 645, 150 ft from s and e lines. Ray Featherstone Oil Co., Wichita Falls, Alcorn 1, No. 623, Honeycutt sur, 150 ft e of center of w line.

CALLAHAN COUNTY—St. Mary's O&G Co., Moran, Pruett 7, 2287, TE&L sur, 300 ft e of 4. Duffy, Moutray & Goodloe, Abilene, Alvord 2, S 75, Bayland Asy sur, 600 ft n of 1. Moutray Oil Co., Abilene, Flores 4, S 149, BBB&C sur, 350 ft e of 3. J. H. Kleiner, Putnam, Yarbrough 1, 2299, TE&L sur, 750 ft from e and 450 ft from s line.

CALDWELL COUNTY—M. W. Koenig, San Antonio, Tiller 5, J. Henry sur, 260 ft n of 4.

COLEMAN COUNTY—Jameson, Pollard et al, Coleman, Dunn 1, No. 669, Trevino sur, 150 ft from s and w lines. Nancy McChesney, Olney, Story 1, S. Sprague sur, 748, 160 ft from s and 150 ft from e line. Gwinnup & Bradstreet, Fort Worth, Morris 1, No. 269, R. Cochran sur, 200 ft from s and w line.

COOKE COUNTY—F. H. Lawson, Dallas, McFadden 1, No. 69, G. M. Bond sur, 150 ft from s and e lines.

CROCKETT COUNTY — Dixie Oil Co., McCamey, Thompson 1, S 72, blk 1, I&GN sur, 150 ft from s and w lines.

DUVAL COUNTY — Humphreys Corp., Houston, Harper-King 1, S 323, blk 7, 150 ft e of center of w line.

EASTLAND COUNTY—Henry Atwood et al, Ranger, Webb 1, S 2, HT&B sur, 1000 ft from n and 600 ft from w line. B. L. Keudell, Gorman, Collins 1, S 3, blk 2, H&TC sur, 250 ft from n and w lines.

GONZALES COUNTY — Gree & Shall, Yoakum, Dubose 2, J. Pratt.

GRAY COUNTY—Empire G&F Co., Wichita Falls, Bender 1, S 164, blk 3, I&GN sur, se corner.

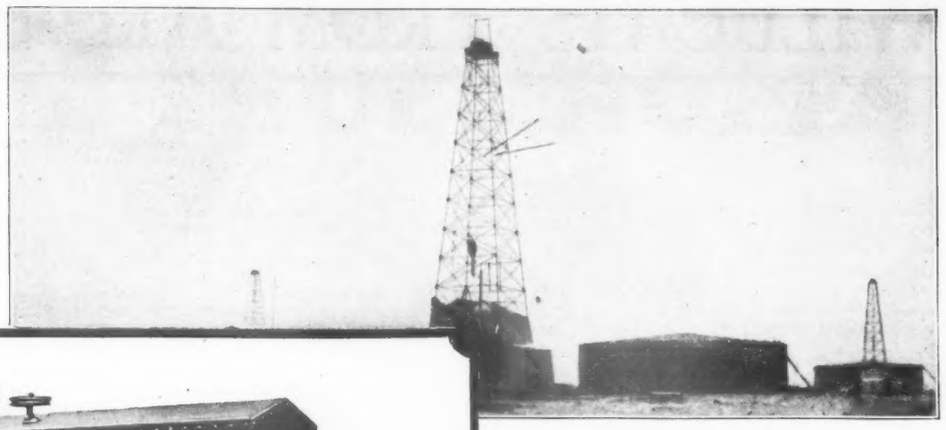
HARRIS COUNTY—J. E. Thompson, Humble, Hammond 2, blk 5, J. Strange, n of 4 Barkley & Meadows, Wichita Falls, Burt A 3, Stevenson sur, 83 ft e of center of w line. Moody Corp., Houston, Calvert 3, blk 11, J. Hamilton sur, 1219 ft n of center of s line; Cooper 1, blk 10, J. Hamilton sur, 1315 ft n of center of s line; Whitehead 2, blk 14, J. Hamilton sur, 283 ft from e and 800 ft from s line.

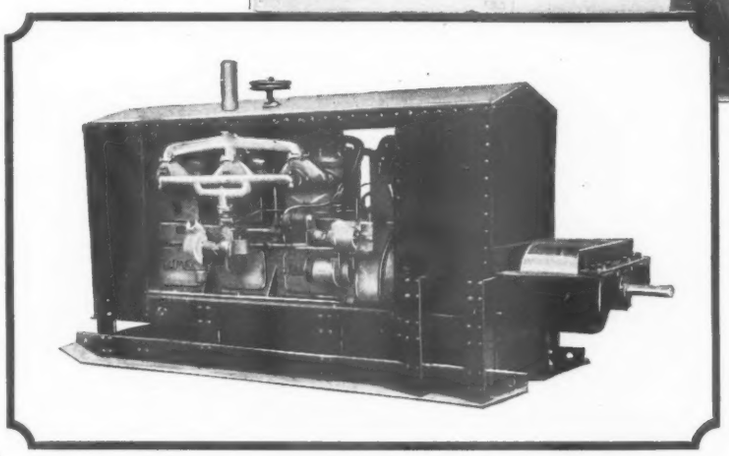
HASKELL COUNTY — Kouri & Healdton O&G Co., Wichita Falls, T. Newcomb 1, S 4, blk 3, H&TC sur, 150 ft from e and 1458 ft from s line.

HARDIN COUNTY — E. W. Skinner Oil Co., Saratoga, Kirby 5, BBB&C sur, e central.

HOWARD COUNTY — Coyle-Concord Oil Co., San Antonio, Roberts 4, S 156, blk 29, W&NW sur, 1210 ft from e and 1470 ft from n line; 3, 660 ft from e and 1470 ft from n line. Gulf Prod. Co., Fort Worth, Chalk 4, S 125, blk 29, W&NW sur, 414 ft from w and 1523 ft from s line.

(Continued on page 88)





This High-Speed Climax "Paymaster" 6-cylinder drilling unit is equipped with such features as electric starter, double ignition, gas or gasoline carburetor, instrument board, anchor turnbuckles, etc., and its low weight per h. p. makes it just as easy to move as most 4-cylinder engines.

Drilling 55% Faster Than the Next Fastest Rig

Some time ago, in west Texas, the Magnolia Petroleum Company sunk a well with a Climax "Paymaster" High-Speed Drilling unit. It so happened they spudded in close to a couple of other makes of drilling units. At the end of ten days the Climax unit was within 200 ft. as far down as the unit that had a 20-day head start. And it was within 260 ft. as far down as the unit that had a little over 24 days head start. The Climax High-Speed Drilling unit was drilling 55% faster in one case and 75% faster in the other—you know which outfit struck oil first. If you are interested in seeing one of these units in action, write us. There may be one within driving range.

CLIMAX

High-Speed Drilling Units

CLIMAX ENGINEERING COMPANY
75 West 18th Ave. Clinton, Iowa

DISTRIBUTED BY
THE NATIONAL SUPPLY COMPANIES

Say you saw it in The OIL WEEKLY

WILDCATS FROM ALL SECTIONS

ARKANSAS
Completions

Company, Well and Location		Initial Production Bbls.	Depth
NEVADA COUNTY—			
Freun et al, Rhodes 1, 22-12-21	*		1515
OUACHITA COUNTY—			
Copenhagen et al, Berg 3, 13-15-17..	*		2312
Magnolia, Stout B-1, 28-14-16	*		3414
UNION COUNTY—			
Bondurant et al, Garner 1, 8-18-12 ..	*		2635
Gulf, Murphy 45, 4-16-15	*		dk
Imperial O. & G. Co., Goodwin 1, 26-17-16	*		3118
J. J. O'Brien, Saxon 1, 16-16-16	*		2658
Ohio Oil Co., Pumphrey 1, 1-17-14..	*		3037
E. N. Wood, Houston 1, 12-16-16 ...	*		2743

BRADLEY COUNTY—Johnson & Adams' Southern Lbr. Co. 1, 12-12-12, sd 2204 ft.

CLARK COUNTY—McKenzie Oil Co.'s Eaken 1, 9-11-19, sd 645 ft.

COLUMBIA COUNTY—Mitchell et al's Franks 1, 25-19-22, sd 150 ft. Sunny Jim Oil Co.'s Runyon 1, 3-16-21, dr 2754 ft. Van Hagen Synd's Pickler 1, 19-19-22, sd 850 ft; Mason 1, 31-19-22, rig.

DREW COUNTY—McClintock et al's Ogle 1, 35-13-3e, sd 2550 ft.

GRANT COUNTY—Jones et al's Meeks 1, 5-14-11, sd 1400 ft.

LAFAYETTE COUNTY — Ken-Saw Pet. Co.'s Kensaw 1, 31-19-24, sd 3310 ft.

LINCOLN COUNTY—Pine Prairie O. & G. Co.'s Carter 1, 33-10-6, sd 2176 ft.

LINCOLN COUNTY—Pine Prairie O. & G. Co.'s Carter 1, 33-10-6, sd 2176 ft.

LITTLE RIVER COUNTY—Grote et al's Allen 1, 2-13-31, sd 2941 ft.

MILLER COUNTY—Guess et al's Saunderson 1, 14-15-25, dr 2150 ft.

NEVADA COUNTY—Aines & Zingg's Womack B-1, 10-14-21, wosr 1215 ft. McDonald et al's Pell 1, 9-15-22, dr 2397 ft. J. J. O'Brien's Haynie A-5, 6-14-20, wosr 1204 ft; Haynie B-1, 6-14-20, wosr 1218 ft; Haynie B-5, 1-14-21, plugged back to 1163 ft; Moss A-17, 1-14-21, rig.

OUACHITA COUNTY—Buffalo Oil Co.'s Culp 1, 22-15-19, sd 2075 ft. A. T. Grayson's Reynolds 1, 21-14-17, sd 1756 ft. H. M. Harrel's Ponder A-1, 18-12-17, set 6⅝-in at 1590 ft. Humble's Murphy 4, 3-16-15, set 4½-in at 2622 ft. H. M. Harrell, Tr.'s Ponder 1, 18-12-7, set 6⅝-in at 1595 ft. Marine Oil Co.'s Hayes 5-A, 4-16-16, lcn. Phillips Pet. Co.'s Betty Joyce 19, 33-15-15, shot casing at 2646 ft. Standard's Goodwin B-1, 6-16-15, out cement 2001 ft.

UNION COUNTY—C. H. Allison's Fitzgerald 10, 17-12-15, set 6⅝-in at 2154 ft. Brown et al's Slaughter 1, 2-17-16, sd 2296 ft. Booth et al's Rowland 1, 8-17-11, coring 2966 ft. Grimes Bros.' Van Hook 9, 7-18-14, testing 2226 ft. E. M. Jones' Crain 2, 2-17-14, sd 3040 ft; Crain 3, 2-17-14, set 6⅝-in at 3076 ft; Crain 4, 2-17-14, set 6⅝-in at 3076 ft. W. R. Keever's Ezell 5, 12-17-15, set 6⅝-in at 2170 ft. Keene & Wolfe's Murphy 6, 9-16-15, dk. Lion O. & R. Co.'s Horn 1, 17-17-13, r 3065 ft; Leverette 1, 11-16-16, set 6⅝-in at 1964 ft; Murphy D-7, 8-16-15, dr 2703 ft. Laurel O. & G. Co.'s Houston 1, 12-16-16, fsh 2630 ft. Lyall et al's Stegall 1, 11-17-15, sd 47 ft. Magna Prod. Co.'s Dumas 1, 11-17-14, set 10-in at 157 ft; Townsend 1, 10-17-14, rig. Magnolia Pet. Co.'s Carroll 2, 1-17-14, sd 1500 ft; Laney 3, 8-16-16, dk; Laney 4, 8-16-16, dk; Wilson 7, 17-16-15, testing 2485 ft; Murphy 8, 8-16-15, tested sw at 2445 ft. Mountz et al's Pratt 6, 8-16-15, recemented 6-in at 2146 ft. C. E. Murdock's Murphy 2, 17-16-15, perforated casing 2117 ft. Murdock et al's Vestal 1, 17-16-15, sd 2561 ft. National Cons. Pet. Corp.'s Fagg 1, 8-16-16, wosr 2643 ft. Nat. G. & F. Corp.'s Hill B-3, 5-16-15, lcn. Ohio Oil Co.'s Crain 4, 1-17-14, dk; Crain 5, 1-17-14, wosr 3056 ft; Crain 6, 1-17-14, set 6⅝-in at 3031 ft; Crain 7, 1-17-14, set 6⅝-in at 3028 ft; Goode 1, 2-17-14, coring 3028 ft; Goode 2, 2-17-14, set 6⅝-in at 3049 ft; R. Pumphrey 2, 2-17-14, set 6⅝-in at 3009 ft; R. Pumphrey 3, 2-17-14, dr 2930 ft. Pitcher et al's Arkansas Timber Co. 1, 21-17-11, tested dry 1796 ft. Pitcher & White's Kinard 1, 17-19-15, dr 2411 ft. Rice et al's Newton 1, 13-17-16, sd 3183 ft. Rovenger Oil Corp.'s Harrell 4, 15-17-16, dk. Sun Oil Co.'s Hays 3, 3-16-15, sd 2275 ft. Standard Oil Co.'s Murphy 33, 4-16-15, sd 2585 ft. Wingfield et al's Greer 1, 15-19-13, sd 50 ft.

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas-casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; wosr—waiting on standard rig.

LOUISIANA
Completions

Company, Well and Location		Initial Production Bbls.	Depth
CADDO PARISH—			
Greenwood Prod. Co., Alexander 1, 27-18-16	*		922
CATAHOULA PARISH—			
Lochnager et al, Beazley 2, 26-9-6e ..	*		3318
NATCHITOCHES PARISH—			
Tate et al, Leopold 1, 4-10-10	*		lcn

BIENVILLE PARISH—E. J. Forrest's Perritt 1, 11-17-6, sd 600 ft. Lake Bistineau Gas Co.'s State 1, 16-16-10, sd 2531 ft. Louisiana Pet. Co.'s Hayes 1, 18-16-15, ds stuck 2800 ft.

BOSSIER PARISH—Ark. Nat. Gas Co.'s Barnett 1, 17-23-12, dr 2750 ft. Autrey Oil Co.'s Snyder 4, 22-19-11, set 6-in at 408 ft. R. L. Crook's Larkin 9, 14-19-11, lcn. C. F. Davis et al's Simpson 5, 14-16-12, dr 800 ft. Doern et al's Bollinger 1, 9-22-11, dr 3400 ft. H. S. Goodwin's Mercer 1, 21-16-12, set 10-in at 100 ft. Hamiter et al's Hamiter 1, 10-23-13, dr 1450 ft. Humble's B. & W. 30, 15-19-11, sd 4791 ft. J. S. McCullough's Hodges 5, 25-16-12, sd 1400 ft. Magnolia Pet .Co.'s G. W. Roberson 1, 26-23-12, testing 3059 ft. O'Brien Bros.' Farrington 1, 21-23-12, dr 2820 ft. R. O. Roy's Werner 1, 7-17-11, dk. Walker et al's Antrim 1, 28-23-12, dr 2800 ft. Woodley & Collins' L. & A. 3, 15-23-12, dr 3156 ft.

CADDO PARISH—Ark. Nat. Gas Co.'s Alexander 1, 20-16-15, dr 1840 ft; Lane 1, 13-21-15, sd stuck 4090 ft. Bee Oil Co.'s Muslow 1, 29-20-15, dr 1010 ft. Bussa & McGoldrick's Bickham 7, 28-21-15, wosr 1603 ft. J. W. Burto, Tr.'s Caldwell 8, 18-21-15, dk. Belchic & Laskey's Boyton et al 1, 11-18-16, sd 1600 ft. W. D. Chew's State 6, 34-21-16, dk. Dixie Oil Co.'s C. M. L. 9, 23-21-15, wosr 3909 ft; Clark 9, 14-21-15, r 3956 ft; Robertshaw 90, 14-21-15, r 2986 ft; Robertshaw 91, 14-21-15, dk; Robertshaw 92, 13-21-15, dr 3547; Huckaby 1, 33-22-15, dr 1938 ft; Huckaby 4, 11-21-15, set 8½-in at 3661 ft. Ferguson et al's Abney 2, 7-17-16, plugged back-perforated casing 930 ft; Abney 3, 1-17-16, set 10-in at 60 ft. Gulf Ref. Co.'s Tyson 14, 14-21-15, arr to deepen 3939 ft. Greenwood Prod. Co.'s Cooper & Ellebre 1, 15-18-14, coring 2572 ft. Hayes Bro.'s Spell 1, 15-21-15, pulling liner 3911 ft; Spell 2, 15-21-15, sd 3092 ft. Magnolia's Bell 2, 6-17-16, dk; J. W. Furrh 1, 28-18-16, sd 1998 ft; J. Furrh 1, 32-18-16, coring 2741 ft; Dillon 18, 24-21-15, dk; Dillon 21, 23-21-15, lcn; Robertshaw 22, 23-21-15, dr 3484 ft; Hampton A-8, 15-21-15, coring 2684 ft. Ohio Oil Co.'s Smith 25, 12-21-15, dr 5725 ft. Palmer Corp.'s Sellington 1, 17-21-14, fsh for 4½-in at 4395 ft. Pittsburgh O. & D. Co.'s Herndon 1, 15-21-15, arr to deepen 3946 ft. Rogers & Jensen's Newton Smith 1, 22-20-16, set 6-in at 2180 ft. Shreveport Oil Corp.'s Muslow 2, 32-2-15, lcn; State 1, 23-21-16, dk; State 2, 27-21-15, sd 2400 ft. Simplex Oil Co.'s Thomas et al's 3, 15-20-15, wosr 2355 ft; Thomas et al 4, 15-20-15, wosr 2208 ft. Standard's Stiles 190, 27-21-16, sd 1948 ft; Stiles 191, 27-21-16, set 6-in at 1806 ft; Hart 16, 34-21-16, wosr 1893 ft. Superior Oil Co.'s Youree 8, 26-20-15, wosr 2318 ft. Standish Oil Co.'s Jolly 1, 22-22-15, cemented cavity at 1048 ft. The Texas Co.'s C. M. L. 47, 23-21-15, sd 2657 ft; C. M. L. 50, 23-21-15, arr to blow 3910 ft; Mabry 10, 15-21-15, wosr 3930 ft; Herndon 7, 14-21-15; Herndon 8, 14-21-15, dr 3680 ft; Herndon 9, 14-21-15, set 10-in 2596 ft; Herold 10, 14-21-15, sd 2925 ft; Raines 19, 15-21-15, dr 4342 ft; Noel B-13, 14-21-15, arr to deepen 3815 ft. Tubbs et al's Hines 1, 16-14-16, set 6-in at 2268 ft. Woodley Pet. Co.'s Knight B-5, 39-15-12, set 6-in at 1911 ft. Woodley & Collins' McVey A-1, 23-19-14, tested small show of oil and gas at 2570 ft. Waterman Brick & Tile Co.'s Fee 1, 18-17-16, sd 2340 ft.

CALDWELL PARISH—Grayson Oil Co.'s Crockett 1, 6-12-14, sd 2602 ft.

CATAHOULA PARISH—Lochnager et al's McMillan 1, 29-8-6e, sd 3500 ft. Standard Oil Co.'s Tensas 1, 23-8-5e, r 2557 ft.

CLAIBORNE PARISH—El Dorado Chief Oil Co.'s Jones 1, 8-20-6e, rig. Magnolia Pet. Co.'s Lee 1, 16-22-8, coring 4877 ft.

DE SOTO PARISH—American Controlled Oil Co.'s Lanier 2, 5-11-11, dr 2720 ft. J. H. Askew's Richardson 3, 25-13-11, dr 2425 ft. Carlton Drlg. Co.'s Stevens 1, 12-11-16, sd 1000 ft. Cahl Daniels' Frost Johnson 1, 1-11-16, sd 100 ft. Dixie Oil Co.'s Jenkins 1, 9-12-11, dr 5927 ft. J. W. Downey's Dickson 1, 23-14-23, sd 1050 ft. Foster et al's Johnson 1, 7-10-12, sd 2050 ft. Hazlett-Simmons' Neeley 2, 1-14-12, sd 600 ft. R. O. Roy's Lee 1, 33-14-13, dk; Whittaker 1, 4-13-13, rig; Tracy 1, 3-13-13, dk. Reliance Drlg. Co.'s Jones 1, 8-11-14, sd 2815 ft. Wingfield et al's Haygood 1, 18-10-12, sd 2400 ft.

FRANKLIN PARISH—Barbour Oil Co.'s Baker 1, 3-15-7e, sd 2884 ft. PittsburghO. & D. Co.'s Moore 3, 12-11-6e, sd 2227 ft. Louisiana Pet. Co.'s Tensas 1, 11-11-6e, sd 2503 ft.

GRANT PARISH—W. D. Ball et al's Calhoun 1, 4-7-4w, sd 2106 ft. Swope et al's Fee 3, 18-9-1e, sd 1607 ft; Fee 5, 18-9-1e, dk.

LA SALLE PARISH—Elbert Pet. Co.'s Urania B-3, 7-10-2e, sd 700 ft. Wingfield et al's Gibson 2, 2-9-1e, sd 3073 ft.

MADISON PARISH—W. S. Smith's Yerger 1, 1-16-4e, arr to deepen 1700 ft.

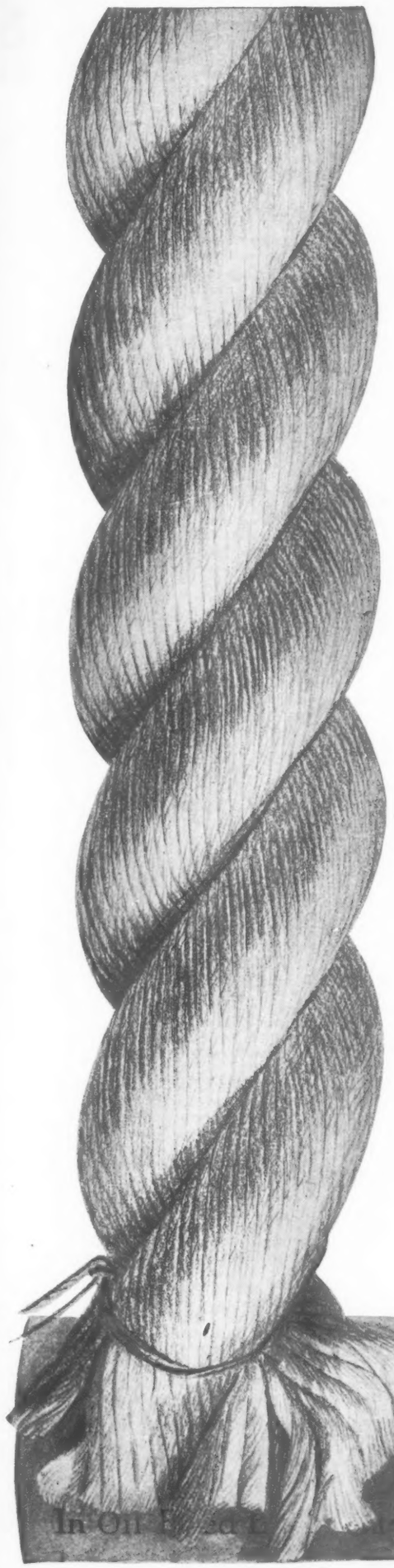
MOREHOUSE PARISH—Chas. Bennett's Davis 1, 21-20-4e, dk; Consolidated Pet. Co.'s Perry 1, 14-20-4e, dr 1860 ft. C. E. Jordan's Southern Carbon Co. 1, 14-20-4e, set 10-in at 258 ft. R. O. Roy's Lee 1, 33-14-13, dk. The Texas Co.'s Meyers 1, 15-22-7e, set 12½-in at 284 ft. United Carbon Co.'s Atkins 1, 26-20-5e, dk.

OUACHITA PARISH—J. M. Huber's Edwards 4, 1-18-4e, rig. Jordan Drlg. Co.'s Slagle 1, 48-18-4e, dk. Palmer Corp.'s West Virginia T. Co. 3, 5-18-4e, dr 1775 ft. United Carbon Co.'s Nelson Fee 2, 6-19-5e, fsh 1720 ft. W. Va. O. & G. Co.'s Fee 5, 5-18-4e, testing 2173 ft.

RAPIDES PARISH—Collins Bros.' Allen 1, 25-5-1w, sd 1410 ft.

RICHLAND PARISH—Gulf's Wayne L. & T. Co. 2, 23-16-5e, sd 2453 ft; Millsaps 1, 8-17-6e, dr 2375 ft; Rhymes 3, 38-17-16, lcn; Weylond 1, 20-18-6e, set 15½-in at 127 ft. La. Pet. Co.'s Binion 1, 22-17-16, sd 2474 ft. Moody & Seagraves' Osborne 1, 14-15-5e, dr 2456 ft; Noble 1, 36-16-5e, dr 2300 ft; Hatch 1, 34-16-15, set 15½-in at 180 ft; Hemler B-2, 6-15-6e, dr 2295 ft; Hemler C-1, 29-16-6e, set 10-in at 910 ft; La Falouer 1, 18-16-6e, set 15½-in at 130 ft; McDonald 1, 9-15-5e, sd 50 ft. Natural Gas & Fuel Corp.'s Sortor-Phillips 1, 9-16-6e, set 15½-in at 203 ft; Sortor B-3, 19-16-6e, lcn; Sortor B-4, 19-16-6e, lcn; Thompson A-1, 21-16-6w, set 15½-in at 203 ft. Noe & Meredith, Tr.'s Broughton 1, 4-15-6e, rg. Ouachita Nat. Gas Co.'s Cummings 1, 24-17-5e, set 6-in at 914 ft. Oliver & Master's Hatch 2, 2-15-5e, rig. Ruston Drlg. Co.'s Sortor 1, 17-16-6e, set 12-in at 178 ft. Southern Carbon Co.'s Sortor 1, 20-16-6e, set 6-in at 2280 ft; Sortor 2, 20-16-6e, lcn; Sortor 3, 18-16-6e, dk. Stovall Drlg. Co.'s Dunning 1, 26-16-6e, set 6-in at 2383 ft. United Carbon Co.'s Mulhern 1, 20-16-6e, rig.

SABINE PARISH—Ark. Fuel Oil Co.'s Logan 10, 32-10-12, sd 3980 ft. S. P. Borden, Tr.'s Logan 1, 36-10-13, arr to test 3304 ft. Clark Seip et al's Moore 1, 32-10-12, dr 2750 ft.



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Dixie Oil Co.'s Steinfield 1, 20-10-12, dr 2730 ft. Doern et al's Pickering Lbr. Co. 1, 17-4-11, set 10-in at 100 ft. L. M. Emlet's Bowman Hicks 6, 8-7-12, sd 3710 ft; Bowman Hicks 7, 11-7-14, sd 3585 ft; Mansfield H. L. Co. 1, 15-7-14, sd 475 ft.

UNION PARISH—Barbour Oil Co.'s Tugwell 1, 21-22-1e, sd 1080 ft. Carter et al's Security Trust 1, 7-23-1e, sd 2257 ft. Interstate Natural Gas Co.'s Parks 1, 32-20-3e, dk; Stephenson 1, 6-21-4e, lcn. Natural Gas Prod. Co.'s Waldrop 1, 7-21-3e, dk. Southern Carbon Co.'s Harris 1, 20-20-4e, dr 2154 ft. John Potts, Agt.'s Bernstein 1, 30-20-4e, set 12-in at 230 ft.

WEBSTER PARISH—Ark. Nat. Gas Co.'s North Central Texas 1, 36-23-10, sidetracking junk 1800 ft. Humble's Gray 1, 26-21-10, dr 4125 ft; Babb 5, 14-21-10, dr 2989 ft. S. A. Lane's Miles 1, 24-17-9, sd 1469 ft. Magnolia's Camp 1, 36-23-10, lcn; Aarnes Cox 3, 22-21-10, dk; Mixon 1, 22-23-10, sd 2727 ft; Cole 1, 27-21-10, dr 3860 ft; Munn 1, 29-23-9, set 10¾-in at 421 ft; J. L. Munn 1, 29-23-9, dr 90 ft. D. G. Cox 1, 22-21-10, dr 3453 ft; Roseberry 1, 29-23-9, set 6⅝-in at 2706 ft. Northwest Gas Co.'s Munn 1, 36-23-10, testing 2729 ft. Ohio Oil Co.'s Crichton 2, 21-21-10, set 15½-in at 599 ft; Bodcaw 38, 15-21-10, set 12½-in at 619 ft.

WINN PARISH—Ohio Oil Co.'s Rolen Account 1, 5-12-1w, dr 3465 ft. H. M. Roark's Southern Mineral Co. 3, 19-11-3w, sd 650 ft.

WEST CARROLL PARISH—Palmer Corp.'s White 1, 2-19-10, dr 2679 ft.

OKLAHOMA

T 28n, R 3w, Grant County—Sec 6, Otstot Dev. Co.'s Snyder 1, ne c, sd 4518 ft.

T 27n, R 21w, Harper County—Sec. 24, A. F. Koplan Oil Co., Selman 1, ne c se, spd and sd.

T 27n, 15w, Woods County—Sec 20, Sooner State Oil Co. & E. R. Black, Marcum 1, c sw, spd and sd.

T 27n, R 5w, Grant County—Sec 18, J. W. Bailey et al's Custard 1, c se, sd 4605 ft.

T 27n, R 1e, Kay County—Sec 8, Mathews et al's Buessing, nw c, cellar.

T 27n, R 1e, Kay County—Sec 28, Hazel, Atlass Glass Co.'s Vickery 2, nw c se se nw, lcn.

T 26n, R 4w, Grant County—Sec 34, Sooner State Oil Co.'s Royce 1, sw c nw, sd 550 ft.

T 26n, R 2e, Kay County—Sec 32, J. A. Vincent et al's McNeal 1, sw c ne, sd 2795 ft.

T 25n, R 22w, Harper County—Sec 14, Hoffer Oil Co.'s Cooper 1, nw c se, sd 4182 ft.

T 25n, R 4w, Grant County—Sec 22, Cowden et al's Vallner 2, ne c se ne sw, dr 5607 ft.

T 25n, R 1w, Kay County—Sec 15, Tonkawa Dev. Co.'s McDaniels 1, se c, ¶1 at 3980-88 ft oih, dr 4395 ft.

T 25n, R 1e, Kay County — Sec 10, Miller Borthers Anderson 1, nw c se, hfw 2565-90 ft, 3852-80 hfw, dr 3943 ft.

T 21n, R 1w, Noble County—Sec 7, R. L. Corley's Williams 1, se c ne sw, sd 1920 ft.

Oklahoma Panhandle

T 6n, R 2e, Cimarron County—Sec 24, J. G. Phillips' School Land 1, nw c, sd 4008 ft.

T 5n, R 2e, Cimmaron County—Sec 22, Sinclair O&G Co.'s School Land 1, nw c, sd 4535 ft.

T 5n, R 5e, Cimarron County—Sec 27, Ramsey Brothers' State 1, c nw ne, top 4265 ft, show 35 bbls, shot 30 qts, 4090-4140 ft, td 4552 ft, sd.

T 5n, R 6e, Cimarron County—Sec 4, Ramsey Pet. Co.'s School Land 1, se c, sd 4265 ft.

T 4n, R 1e, Cimarron County—Sec 34, Ramsey's School Land D1, c se, dr 2584 ft.

T 4n, R 25e, Beaver County—Sec 22, O. H. Bonner et al's Maple 1, c se ne, rig.

T 2n, R 9e, Cimarron County—Sec 2, Fenton, Brookins & Flowers' Smaltz 1, sw c ne ne, spd and sd.

T 2n, R 18e, Texas County—Sec 23, Connelly, Trammell & Danner's Graves 1, ne c sw sw, sd 315 ft.

T 1n, R 15e, Texas County—Sec 26, Hydraulic Oil Co.'s Hitch 1, ne c, sd 600 ft.

T 1n, R 19e, Texas County—Sec 11, Trammell, Connelly & Danner's Tansey 1, se c nw, sd 280 ft.

T 1n, R 18e, Texas County—Sec 11, Three Way Oil Co.'s Price 1, se c nw, show gas 2560-2620 ft, sd 3005 ft.

T 24n, R 17w, Woodward County—Sec 32, Otstot Dev. Co.'s Simmons 1, se c sd 1500 ft.

T 24n, R 6w, Garfield County—Sec 9, Pulse & Beamer's White 1, se c nw, sd 4720 ft.

T 24n, R 3w, Garfield County—Sec 14, Sagar Oil Co.'s Garsarch 1, se c, dr 3765 ft.

T 23n, R 16 w, Major County—Sec 4, Henry Landon's Parker 1, ne c nw, sd 1150 ft.

T 22n, R 5w, Garfield County—Sec 3, Ashby & Barr's Swinery 1, nw c, sd 740 ft.

T 21n, R 25w, Ellis County—Sec 9, Oklahoma Northern Oil Co.'s 1, c se nw, cas stuck 300 ft.

T 21n, R 21 w, Woodward County—Sec 25, Sharon et al's Elmore 1, sw c, sd 2778 ft.

T 21n, R 4w, Garfield County—Sec 12, Beopple et al's Schriver 1, c e l sw sw ne, sd 1850 ft.

T 20n, R 5w, Garfield County—Sec 2, Sinclair O&G Co.'s Fee 1, sw c ne, plugged and abnd.

T 20n, R 4w, Garfield County—Sec 9, Marland Oil Co.'s Looman 1, ne c se, dr 5696 ft.

T 20n, R 4w, Garfield County—Sec 12, Marland Oil Co.'s Miller 1, sw c, sd 4586 ft.

T 19n, R 4w, Logan County—Sec 8, Champlin Ref. Co.'s Musgrove 1, se c sw, dr 3976 ft.

Sec 33, Bryan & Emery's 1, nw c se, td 4505 ft, will plug and abn.

T 18n, R 15w, Dewey County—Sec 9, Huckelby & McCoy's Perfect 1, ne c, se 3274 ft.

T 18n, R 4w, Logan County—Sec 11, Welch, Acton & Brown's Hall 1, nec se, sand 4748-59 ft, swab 130 bbls, set 6-in cas 4865 ft, co.

T 18n, R 3w, Logan County—Sec 33, Haley & Pioneer Pet. Co.'s Quier 1, sw c se, dr by cas.

T 17n, R 1e, Logan County—Sec 20, T. B. Slick's Signs 1, nw c sw, sd 5067 ft.

T 17n, R 1e, Logan County—Sec 28, T. B. Slick's Berry 1, sw c se, sand 4658-61 ft, 2800 ft oih, hfw 5305-30 ft. rep rig 5330 ft.

T 16n, R 7w, Kingfisher County—Sec 6, Pet. Eng. Core Drlg. Co.'s Campbell 1, c nw se, rig.

T 16n, R 5w, Kingfisher County—Sec 26, Galt Brown Oil Co.'s Johnson 1, c nw, dr 4115 ft.

T 16n, R 1w, Logan County—Sec 28, Blackford O&G Co.'s Lair 1, c s l n ½ se, sd 1675 ft.

T 15n, R 1w, Logan County—Sec 12, Bu Vi Bar Pet. Co.'s Kirkpatrick 1, c sw, dr 4283 ft, hfw.

T 14n, R 6w, Canadian County—Sec 9, A. D. Spears' Piatt 1, se c ne, sd 3223 ft.

T 13n, R 10w, Oklahoma—Sec 18, Carroll Oil Corp.'s North 1, ne c, sd 1500 ft.

T 13n, R 3w, Oklahoma County — Slick & Bailey's Lufkin 1, c ne se, td 3750 ft, r. u. s. t.

T 12n, R 3w, Oklahoma County—Sec 15, Cromwell O&G Co.'s Thompson 1, sw c ne, ne, fsh dr pipe 6705 ft.

T 10n, R 6w, Canadian County—Sec 1, J. V. Bailey's Robinson 1, c ne nw, spd and sd.

T 27n, R 9e, Osage County—Sec 7, C. B. Peters 1, ne c se, sd 2650 ft.

T 26n, R 8e, Osage County—Sec 13, Stephenson, Henry & Rock's 1, swc nw sw, rig.

T 25n, R 7e, Osage County—Sec 8, I. T. I. O. Co.'s 1, sec ne, rigging up.

T 23n, R 10e, Osage County—Sec 7, Sheeders O&G Co.'s 1, c se, fsh tools 2340 ft.

T 21 n, R 6e, Pawnee County—Sec 16, F. R. Billingslea & 101 Ranch Oil Co.'s School Land 2, nwc ne se, sd 3490 ft.

T 18n, R 3e, Payne County—Sec 32, Garber, Pulse & Gloyd's Widows 1, nec se nw, sd 1200 ft.

T 17n, R 3e, Lincoln County—Sec 20, Willis O&G Co.'s Gunn 1, nwc se, td 4677 ft, water sd.

T 14n, R 7e, Creek County—Sec 16, Bu Vi Bar Pet. Co.'s Nero 1, c se ne, dr 1475 ft.

T 13n, R 4e, Lincoln County—Sec 16, Bu Vi Bar Pet. Co.'s School Land 1, c se ne, sd 4500 ft.

T 12n, R 8e, Okfuskee—Sec 34, Transcontinental Oil Co.'s Knight 1, nwc ne nw, dr 3870 ft.

T 19n, R 10e, Tulsa County—Sec 24, Holmes et al's Ragen 1, nwc ne se, ur 2163 ft.

T 17n, R 13e, Tulsa County—Sec 1, E. A. Hawley's Taylor 1, sec ne, spd and sd.

T 13n, R 9e, Creek County—Sec 33, C. G. Tibbens' Marshall 1, swc se sw, mach.

T 14n, R 9e, Creek County—Sec 1, L. C. Wheeler & King's Morton 1, sec nw, lcn.

T 14n, R 11e, Okmulgee County—Sec 19, White Eagle O&R Co.'s Bugg 2, nwc ne se, hfw 3075-88 ft, sd.

T 13n, R 9e, Okfuskee County—Sec 21, Barnsdall Oil Corp.'s Self 1, swc se ne, sd 3274 ft.

T 12n, R 10e, Okfuskee—Sec 8, Blakely et al's M. Yarhola 1, swc se nw, fsh 3157 ft.

T 11n, R 10e, Okfuskee County—Sec 4, Moose & Daniels' Stidham 1, swc nw, sd 622 ft.

T 19n, R 15e, Wagoner County—Sec 11, J. H. Winters' Lynch 1, swc nw nw, sd 1140 ft.

T 15n, R 19e, Muskogee County—Sec 12, C. F. Finefield's Jobe 1, nwc se, sd 1252 ft.

T 11n, R 13e, Okmulgee County—Sec 27, G. N. Buzzard et al's Thompson 1, nwc ne ne, hfw 3010-25, dr 3050.

T 13n, R 17e, Muskogee County—Sec 34, Elk Drlg. Co.'s McKee 1, csl se se se, sd 160 ft.

T 13n, R 19e, Muskogee County—Sec 4, W. R. Sommerville's Carver 1, nec se, 2¶ gas 898-912, show oil 1495-1513 ft, sd 1620 ft.

T 9n, R 16e, Pittsburg County—Sec 32, Pattison et al's Smith 1, nec sw se, dr 3950 ft.

T 9n, R 18e, Haskell County—Sec 10, Marion Oil Co.'s Sanders 1, nwc ne sw, sd 2200 ft.

T 5n, R 18e, Latimer County—Sec 15, Limestone O&G Co.'s Murray 1, swc, sd 1505 ft.

T 11n, R 2e, Pottawatomie County—Sec 22, Wilcox O&G Co.'s Hollis 1, swc, hfw 5253 ft, dry and abandoned. Sec 32, Wilcox O&G Co.'s Pickard 1, sec sw, dr at 4265 ft.

T 10n, R 2w, Cleveland County—Sec 22, Cromwell & Franklin's Donovan 1, c sw, sd 4706 ft.

T 10n, R 3e, Pottamatomie County—Sec 12, Sikes, Kilgore & Shaffer O&R Co.'s Ives 1, c se se, dr 4353 ft.

T 10n, R 4e, Pottawatomie County—Sec 28, Central National Oil Co.'s Toney 1, swc, cem 8 in at 3980 ft.

T 10n, R 5e, Pottawatomie County—Sec 16, Clark, Edwards et al's School Land 1, nec sw, setg 6-in at 4631 ft.

T 9n, R 1w, Cleveland County—Sec 7, Galt Brown Oil Co.'s Alexander 1, c nw, hfw 4212-80 ft, sd 4502 ft.

T 9n, R 7e, Seminole County—Sec 15, Pure Oil Co.'s Jonah 1, nwc ne, ts 3492, 10 bbl oil, td 3516 ft, pb 3510 ft, sd.

T 8n, R 2e, Pottamatomie County—Sec 24, Superior Oil Corp.'s Jones 1, swc nw ne, hfw 4110 ft, ur 6 in csg.

T 8n, R 5e, Pottawatomie County—Sec 16, I. T. I. O. Co.'s School Land 1, sec sw, sd 4096 ft.

T 7n, R 1w, Cleveland County—Sec 15, Sooner Oil Co.'s Vandeer 1, nec nw sw, cem 8 in, 2995 ft, sd.

T 7n, R 6e, Seminole County—Sec 7, Simon & Beam's Palmer 1, nec nw ne, rig. Sec 13, Snowden & McSweeney's Tiger 1, nwc, ts 4315 ft, td 4315½ ft, ip 100 bbl pinched in comp.

T 7n, R 7e, Seminole County—Sec 5, Mid-Continent Pet. Corp.'s Smith 1, nwc ne, top wilcox 4443 ft, td 4444 ft, est 40 bbl per hr, shut in for tankage. Sec 32, I. T. I. O. Co.'s Marshall 1, nwc sw, set 5 in, 4575 ft.

T 7n, R 8e, Hughes County—Sec 21, Jarvis & Holmes' Street 1, nwc se nw, dr 4100 ft.

T 6n, R 2e, Pottawatomie County—Sec 10, Davis, Detrick et al's McGahey 1, sec nw, sd 4988 ft.

T 6n, R 6e, Seminole County—Sec 1, T. B. Slick's Moore 1, swc ne sw, 2408-42 ft, 900 ft oih, shot 8 qt co.

T 6n, R 7e, Seminole County—Sec 5, Magnolia Pet. Co.'s Vierson 1, sec nw, fsh 3315 ft.

T 6n, R 8e, Seminole County—Sec 18, Carter Oil Co.'s Phillips 1, nwc ne nw, (owd) fsh 3936 ft, making ¼ bailer oil per hr.

T 5n, R 9e, Hughes County—Sec 20, Noble O&G Co. et al's Wicket 1, sec, sd 285 ft.

T 9n, R 22w, Beckham County—Sec 32, O&H Pet. Co.'s Barnes 1, nwc ne (owd) dr 2650 ft.

T 9n, R 5w, Grady County—Sec 13, Remington et al's Fulton 1, swc ne, sd 720 ft.

T 8n, R 23w, Beckham County—Sec 5, Prince Bros., Martin & Atlantic's 1, c sw nw, dr 2631 ft.

T 7n, R 22w, Greer County—Sec 16, Magnolia's Chiney 1, nec, running 8 in at 3030 ft.

T 7n, R 5w, Grady County—Sec 13, Bedman et al's Kemp 1, c sw ne, sd 2400 ft.

T 6n, R 10w, Caddo County—Sec 22, English Drlg. Co.'s Jacobs 1, nwc se, sd 3514 ft.

T 6n, R 12 w, Caddo County—Sec 29, W. J. Hartley's Gilbreath 1, sec nw se (owd), sd 3394 ft.

T 5n, R 7w, Grady County—Sec 7, Nichols & Page's Drake 1, cel se, sd 1900 ft.

T 2n, R 10w, Comanche County—Sec 10, Danciger O&R Co.'s Skitler 1, nec se, pipe trouble at 2019 ft.

T 1s, R 5w, Stephens County—Sec 8, Magno-

Another Cutting Job by Abercrombie

114 Cuts—

—ranging from 3 to 30 feet long—in 23-lb. 6-inch casing—cut and removed by J. C. Daily, (Field Supt.), Fred Alford (Driller), T. J. McCoy, W. D. Parsons, C. E. Prescott, and C. M. Abercrombie (Operator), reading from left right.

J.S. ABERCROMBIE INSIDE CUTTING TOOL

—for Sun Oil Co.

Brown No. 2 Well in Orange Field

WITHOUT WASTING TIME, 114 cuts were made and successfully fished out, even though the well had been cemented from 2500 down to 3800 feet. In some cases it was necessary to make cuts as short as three feet as it was impossible to pull larger pieces. THIS is the kind of "Results" you can expect when you let Abercrombie "cut out" wells with the new, improved INSIDE cutting tool.

Wire Us TODAY—and We'll Be There Tomorrow

J.S. ABERCROMBIE Co.
616-18 West Bldg., Houston, Texas, U.S.A.

Say you saw it in The OIL WEEKLY

lia's Parker 1, nwc ne sw, dry and aband at 3730 ft.

T 2s, R 16w, Kiowa County—Sec 6, Landfair et al's 1, sec sw se, 2263 ft, reaming.

T 5n, R 4e, Pontotoc County—Sec 12, Gillespie et al's Fleming 1, swc se, swab 50 bbl at 2043-54 ft, 25 bbl at 2556-57 ft, hfw in wx 2838-52 ft, pb 2550 ft, sd.

T 5n, R 1e, Pontotoc County—Sec 36, Shaffer O&R Co.'s Gilcrease 1, nwc ne, gas 2280-2310 ft, flowing 150 bbl per day.

T 5n, R 9e, Hughes County—Sec 20, Noble O&G Co.'s Wicket 1, sec, sd 285 ft.

T 4n, R 1e, Garvin County—Sec 15, Dixie Oil Co.'s Perkins 1, sec nw, cem cave 3200 ft.

T 4n, R 3e, Garvin County—Sec 10, Garland Oil Co.'s Strickland 1, swc nw sw, ur 8 in, td 2650 ft.

T 4n, R 4e, Pontotoc County—Sec 10, Marland Oil Co.'s Lawrence 1, c sw se, ur 12 in, at 945 ft.

T 4n, R 6e, Pontotoc County—Sec 35, Bowles et al's Rayborn 1, swc se, sd 1320 ft.

T 4n, R 7e, Pontotoc County—Sec 14, Henry et al's Johnson 1, nec sw sd, 1090 ft. Sec 25, Ada Cement Co.'s Potter 1, nwc, ur 8 in at 1075 ft.

T 3n, R 1e, Garvin County—Sec 12, Magnolia Pet. Co.'s Vaughn 1, nwc sw nw, dr 4485 ft.

T 1n, R 8e, Coal County—Sec 35, W. E. McGraw et al's Patton 1, swc se ne, sd 935 ft.

T 4s, R 2w, Carter County—Sec 13, Roxana Pet. Corp.'s Sarasota 1, sec, dr 3405 ft.

T 5s, R 4e, Marshall County—Sec 11, Bilbo et al's Chapman 1, nec nw ne, sd 380 ft.

T 5s, R 7e, Bryan County—Sec 26, Magnolia's Marshall 1, nwc sw nw, dr 2210 ft.

T 7s, R 3e, Love County—Sec 1, Magnolia Pet. Co.'s Askew 1, nwc sw ne, dr 2888 ft.

KANSAS

BARBER COUNTY—T 30 s, R 14w, Rowland et al, Pickens 1, owd, ne c nw ne, sec 27, dr 2600 ft. T 31s, R 12w, Merriman et al, Winters 1, c e½, sec 17, dr 3015 ft. T 33s, R 12w, Schaffer et al, Boggs 1, c sw, sec 19, dr 3835 ft. T 33s, 13w, Schaffer et al, Carter 1, c se se, sec 2, dr 3270 ft.

BARTON COUNTY—T 19s, R 11w, Huffine et al, Smith 1, ne c se ne, sec 17, sd 5090 ft. T 20s, R 13w, Everett & Wiley's Ward 1, nw c sw, sec 12, sd 3940 ft.

BUTLER COUNTY—T 25s, R 4e, Wichita Drlg. Co.'s Joseph 1, ne c se nw, sec 18, fsh 2265 ft. T 27s, R 3e, La Rob Oil Co.'s Baysinger, ne c sw, sec 24, rig. T 27s, R 5e, Cress, Frank et al's Bryson 1, ne c, sec 26, spd and sd. T 29s, R 4e, E. Wilcox et al's Holcomb 1, ne c se nw, sec 21, sd 1456 ft.

CHASE COUNTY—T 21s, R 7e, Greener, Fowler et al's Carson 1, ne c, sec 9, sd 750 ft.

CHATAUQUA COUNTY — T 32s, R 8e, Roth & Faurot's Hamil 1, nw c sw nw, sec 15, lcn.

CLARK COUNTY—T 31s, R 23w, Walker & Walner's Mitchell 1, sw c ne, sec 16, sd 420 ft.

CLOUD COUNTY—T 6s, R 4w, Concordia Oil Co.'s Murdock 1, se c sec 6, sd 3590 ft.

COFFEY COUNTY—T 22s, R 15e, Garland et al's Goff 1, se c sw se, sec 9, lcn. Crooks et al's Douglas 1, ne c se sec 11, sd 450 ft.

COWLEY COUNTY—T 30s, R 3e, Vickers Pet. Co.'s Daniels 1, nw c ne, sec 3, sd 1650 ft. T 30s, R 6e, Allison & Fitzwilliams' Manley 1, ne c nw se, sec 20, sd 450 ft. T 33s, R 4e, Roth & Faurot's Adams 1, se c sec 32, ts 1900 ft 450,000 gas, shut in.

DICKINSON COUNTY—T 16s, R 4e, Skow & Ritchey's Will 1, c nw nw, sec 2, lcn. Loy et al's Sherman 1, nw c se, sec 24, dr 2435 ft. Harwood & Winters' Utek 1, sw c se nw, sec 35, sd 1600 ft.

ELLIS COUNTY—T 13s, R 16w, Tatlock et al's Leiker 1, nw c ne ne, sec 26, sd 2685 ft.

ELLSWORTH COUNTY — T 15s, R 10w, Valerious O&G Co.'s Maximer 1, c nw, sec 9, dr 3340 ft. T 16s, R 9w, Phil-Mac Oil Co.'s Gregory 1, c sw, sec 24, dr 3685 ft.

FRANKLIN COUNTY—T 16s, R 18e, Smith, Trace & Fisher's Owens 1, c e l e½ e½, sec 17, sd 1450 ft. T 17s, R 17e, Omar O&R Co.'s Bush 1, se c sw, sec 25, lcn.

GEARY COUNTY—T 10s, R 5e, Brinkley's et al's Fawley 1, ne c nw ne, sec 16, dr 2502 ft.

GREENWOOD COUNTY — T 25s, R 10e, Smalley & Bement Oil Corp.'s Rockhill 1, nw c ne, sec 12, dr 900 ft. T 28s, R 12e, Swanson et al's Hayes 1, se c nw ne, sec 1, sd 1600 ft. 4130 ft.

GRAHAM COUNTY—T 8s, R 25w, Gulf Coast Or. Co.'s St. John 1, owd, sw c nw se, sec 27, dr 3290 ft.

JEFFERSON COUNTY — T 9s, R 19e, Northern Counties Oil Co.'s Edwards 1, se c nw nw, sec 13, sd 2405 ft.

LABETTE COUNTY—T 33 s, R 17e, Cowell et al's Hornbeck 1, sw c ne sw, sec 1, sd 1375 ft. T 35s, R 20e, Wantland et al's Lipps 1, se c nw sw, sec 5, sd 910 ft.

LOGAN COUNTY—T 14s, R 33 w, Coon et al's Andrews 1, owd, nw c ne nw, sec 14, sd 3855 ft.

LYON COUNTY—T 21s, R 10e, Hawks et al's Schroeder 1, se c sw, sec 14, rig.

MARSHALL COUNTY—T 4s, R 7e, Marshall Oil Synd.'s Finn 1, nw c ne ne, sec 4, sd 2485 ft.

MARION COUNTY—T 17n, R 4e, Givins et al's Ucker 1, sw c ne, sec 31, fsh tools 1710 ft.

MARION COUNTY—T 18s, R 4e, Skow et al's Melcher 1, c ne se, sec 20, sd 1825 ft. T 19s, R 4e. Reed et al's Reed 1, nw c, sec 17, td 2841 ft, pb to 2406 ft, sd. T 21s, R 1e, Sun Ray Oil Co.'s Lehrman 1, sw c ne se, sec 1, fsh 2165 ft.

McPHERSON COUNTY—T 17s, R 3w, La Mar et al's Lamar 1, se c sec 1, dr 3174 ft. T 19s, R 2w, Merriman et al's Clark 1, c ne nw, sec 8, chat 3007 ft, dr 3535 ft. T 20s, R 3w, Polar Oil Co.'s Dary 1, c nw, sec 20, spd and sd.

MEAD COUNTY—T 33s, R 28w, Blackwell O&G Co.'s Lilly 1, c se, sec 9, sd 3310 ft.

MONTGOMERY COUNTY—T 31s, R 14e, Ramler et al's Faler 1, c n l ne ne, sec 31, sd 1085 ft.

MORRIS COUNTY—T 14s R 7e, Klein et al's Barber 1, se c nw, sec 32, rig. T 16s, R 9e, Lambert et al's Southard 1, sw c se, sec 22, lcn.

NEMEHA COUNTY—T 3s, R 11e, Nemeha O&G Co.'s Meyers 1, nw c, sec 19, sd 3050 ft.

OSBORNE COUNTY—T 9s, R 15w, Davis et al's Prather 1, se c sw, sec 30, dr 1750 ft.

OSAGE COUNTY—T 15s, R 15e, Barber et al's Lease 1, c se se, sec 3, sd 260 ft. T 15s, R 16e, West et al's Bailey 1, sw c ne, sec 27, sd 800 ft. T 17s, R 17e, Mull Vit Dev Co.'s Neil 1, nw c ne sw ne, sec 8, sd 3736 ft.

POTTAWATOMIE COUNTY — T 10s, R 12e, Crawford et al's St. Mary 1, sw c, sec 11, sd 2290 ft.

RENO COUNTY—T 22s, R 4w, Danciger et al's Williams 1, ne c sw se, sec 6, rig.

RILEY COUNTY—T 10s, R 7e, Youker et al's Theirer 1, nw c sec 20, dr 3028 ft.

ROOKS COUNTY—T 9s, R 16w, Kays Pet. Co.'s Rathburn 1, ne c sw, sec 14, sd 955 ft. T 10s, R 16w, Derby Oil Co.'s Kruse 1, ne c nw ne, sec 3, td 3067 ft. Streeter & Stearns' Mattison 1, c nw, sec 28, ur 2710 ft.

RUSH COUNTY—T 17s, R 17w, Valerious O&G Co.'s Schreverman 1, c nw, sec 27, spd and sd.

SALINE COUNTY—T 15s, R 2w, Menter O&G Co.'s Muir 1, sw c sec 17, dr 2815 ft.

STAFFORD COUNTY—T 21s R 11w, Harper et al's Siffers 1, owd, nw c sw ne, sec 23, dr 3015 ft.

SUMNER COUNTY—T 33s, R 3w, Otstot et al's Bartlow 1, se c, sec 22, sd 1850 ft. T 34s, R 3w, Gypsy Oil Co.'s Douglas 1, ne c se nw, sec 23, ts 4493-4499 ft, 16 bbls per hour. T 34s, R 3w, Jarvis et al's Wenrich 1, se c sw, sec 4, dr 2940 ft. T 34s R 4w, Jarvis et al's Wycoff 1, sw c nw, sec 11, sd 4212 ft. T 35s, R 1e, Otstot et al's Volker 1, nw c ne, sec 9, rig.

WABUNSEE COUNTY—T 12s, R 11e, Empire O&G Co.'s Schwalm 1, se c sec 19, fsh 3320. T 13s, R 12e, Williams et al's Henderson 1, ne c sw ne, sec 15, sd 3600 ft.

WOODSON COUNTY—T 25s, R 14e, Howard et al's Riley 1, nw c sw, sec 31, lcn.

SOUTHERN CALIFORNIA

CLAREMONT—Claremont O. & G. Co.'s 1, sd 1130 ft.

DAVIDSON CITY—Southern Calif. Well Drlg. Co.'s 1, sd 7060 ft.

DOMINGUEZ—Dominguez Extension Oil Co.'s 1, bailing water and little oil, td 5510 ft.

EL SEGUNDO—Southern Calif. Drlg. Co.'s 1, sd 4865 ft.

FAIRVIEW—Petroleum Securities Co.'s 1, dr hard sand 4461 ft.

GARDENA—Circle O. & G. Co.'s 1, sd

HAWTHORNE—San Clemente O. & G. Co.'s 1, brown shale and oil sand 5690 ft, cores show one-third oil sand.

HUNTINGTON BEACH—Calnan Pet. Co.'s S. & W. 1, sd 5107 ft. Duell Pet. Corp.'s S-1, rig. J. A. Brower's Huntington 1, running 4¾-in oil string to make production test, td 5360 ft. Leo Stein's 1, sd 5155 ft.

INGLEWOOD—Alenson & Co.'s 1, sd 3500 ft. Hurst Oil Corp.'s 1, sd 3740 ft.

LANCASTER—Otis Andrews' 1, rigging rotary. John B. Harding's La Loma 1, sd 825 ft.

LYNWOOD—Security Pet. Corp.'s 1, dr 378 ft.

MAYWOOD—Magnolia Pet. Synd.'s Tweedy 1, sd 2700 ft.

MONTEREY PARK—Monterey Park Pet. Co.'s Browning 1, dr hard sand 3593 ft.

MONTEBELLO—Rotary Air-Drill Co.'s Germain 1, sd 1400 ft.

NEWHALL—W. W. Stabler's Castaic 1, sd 3410 ft.

ORANGE—Chas. A. Son's Pinkerton 1, sd 3620 ft.

PLACENTIA—Shell's Allec 1, dr hard sand 5608 ft.

POTRERO—Associated's Cypress 1, trying to locate water, td 5408 ft.

PUENTE HILLS—Anchor Oil Co.'s Hudson 1, sd 2270 ft.

RIVERA—Associated's Patterson 1, dr 4286 ft, slight oil showings.

SAN FERNANDO—Shell's Mission 1, fsh for dr pipe 4930 ft.

SAN JOSE HILLS—Bardeen Oil Co.'s Didier 1, co 2250 ft. D. & B. Oil Co.'s Amar 1, plug 2600 ft, td 4380 ft. Fuller & Gray's Sanchez 1, rig.

SEAL BEACH—George F. Getty's 1, rigging rotary.

SUNSET BEACH—Olympic Ref. Co.'s 1, rigging rotary.

SAN JUAN CAPISTRANO—O. K. Carr's Forster 1, sd 4200 ft.

TELEGRAPH CANYON—Quadra Pet. Co.'s MJM 1, sd 4210 ft.

YORBA—Standard's Yorba 1, 9-in cas cmt 4835 ft, td 4875 ft, shutoff effected.

WATTS—Southwest Pet. Cor.'s Ramsaur 1, sd 4300 ft.

WATSON—White-Behr Pet. Co.'s 1, dr 4035 ft.

Miscellaneous

RIVERSIDE COUNTY—Hemet Pet. Corp.'s Ward 1, dr hard sand 1663 ft. Spindletop Oil Synd.'s Salton Sea 1, sd 3175 ft. Trabuco Oil Co.'s 1, dr hard sand 3030 ft.

SAN BERNARDINO COUNTY — Colton Terrace Oil Co.'s Colton 1, sd 1620 ft. Como Oil Co.'s Cajon 1, sd 2845 ft. Del Rosa Oil Co.'s 2, sd 915 ft. Hesperia Oil & Gas Co.'s 1A, plug 2800 ft, td 3310 ft. H. & P. Oil Co.'s Ranger 1, pulling 6¼-in cas, td 2140 ft. J. W. McPherson's Yucaipa 1, 320 ft. Western Pacific Oil Co.'s 3, sd 3005 ft.

SAN DIEGO COUNTY—Cardill Oil Corp.'s Turner 1, sd 2805 ft. Davenport Oil & Gas Co.'s 1, dr shell and sand 233 ft. Ganymede Oil Co.'s 1, fsh 1800 ft. J. P. Mills' Pueblo 1, rig. S. S. Turner's Baler (Escondido) 1, dr hard sand 237 ft. Torrey Pines Oil Co.'s 1, sd 480 ft.

NORTHERN CALIFORNIA

Completion

Company, Well and Location	Initial Production Bbls.	Depth
SONOMA COUNTY—		
Shell Co., Murphy 1, 8-5-7	*	6380

FRESNO COUNTY

CLOVIS—Fresno-Madera Oil Co.'s 1, 18-21-21, dr 3900 ft.

RAISIN CITY—Fresno-United Oil Co.'s 1, 23-15-18, sd 3960 ft.

KERN COUNTY

BAKERSFIELD—Pacific Eastern Prod. Co.'s KCL 1, dr in shale and oil sand 5175 ft.

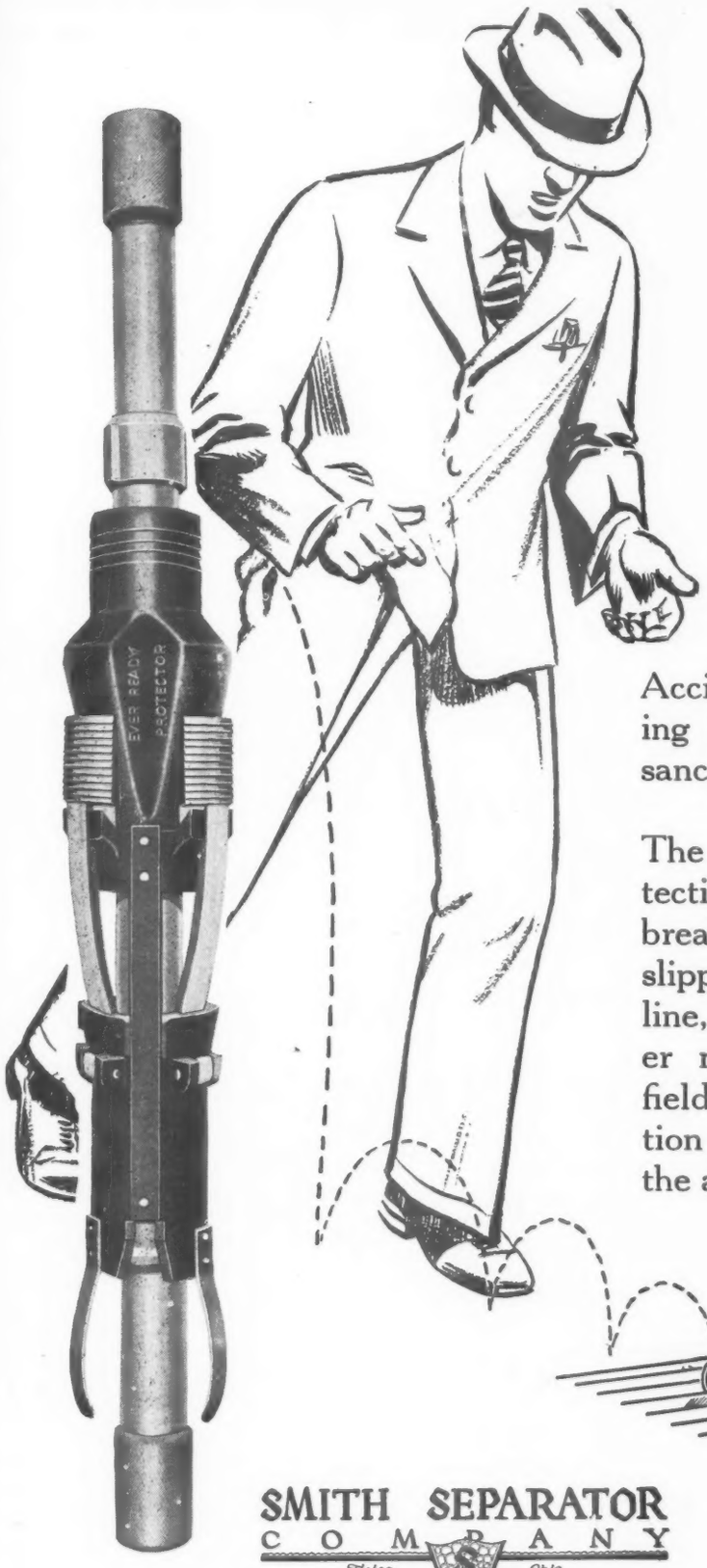
BELRIDGE—Zurich Oil Co.'s 1, 18-28-22, 8¼-in cas cmt 1870 ft, td 2085 ft, dr out cmt.

BUTTONWILLOW—Milham Explo. Co.'s Kern 1A, plug at 2360 ft, td 4660 ft, gas well; No. 1, 7-29-24, 11-in cas cmt on bottom 2570 ft. McAdams Synd.'s 1, 26-29-23, dr blue shale 3126 ft.

COMANCHE POINT—Kern 29 Oil Co.'s 1, 29-31-30, sd 2440 ft.

DELANO—N. American Consolidated Oil Co.'s 1, fsh for dr pipe 3670 ft.

DEVILS DEN—W. T. Garrett's 1, 30-25-19.



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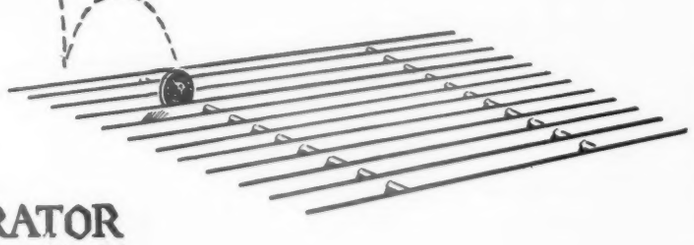

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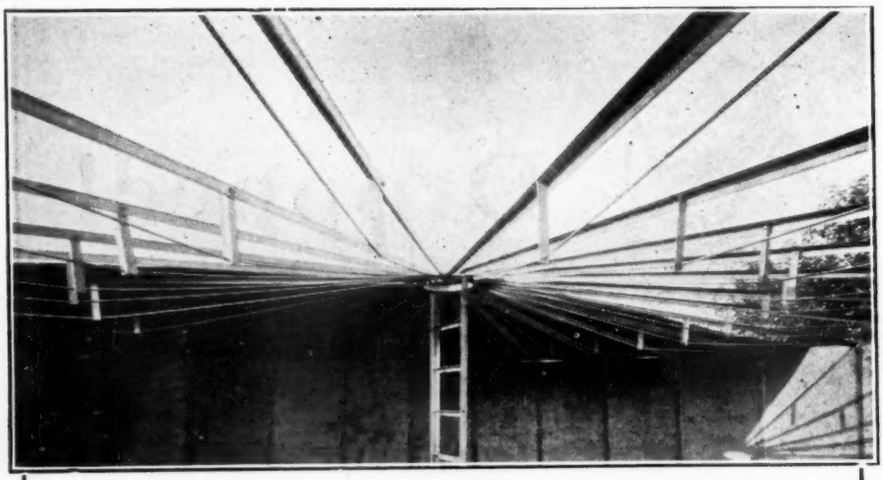

View during construction of 5,000-bbl. Maloney Tank—showing cantilever construction of deck trusses in 1,500-bbl. to 10,000-bbl. sizes.

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MALONEY

TALONE

rig. Marathon Oil Co.'s 1, 13-25-18, sd 4390 ft. Midway-Northern Oil Co.'s 1, 25-25-18, sd 2460 ft. Robins Oil Co.'s 1, 25-25-18, sd 2280 ft. R. H. Sayers' 1, 25-25-18, sd 1475 ft.

EDISON—General Pet. Corp.'s Kerwin 1, trying to produce on pump, td 4006 ft, plug at 3800 ft. Midway-Northern Oil Co.'s 1, 29-29-30, dr brown shale 1475 ft.

FRUITVALE—Pacific Eastern Prod. Co.'s Fruitvale 1, 2-29-27, fsh 3850 ft.

GRANITE CANYON—Pearl Dumal's 1, 32-27-29, lcn.

GOULD HILLS—Bomke & Ball's 1, 12-29-20, sd 1350 ft. Calif.-Kentucky Oil Co.'s 1, 8-29-21, sd 1620 ft. Cymric Oil Co.'s 1, 36-28-20, dr shell 828 ft. Herbert Moore's 1, 11-29-20, dr 531 ft.

McKITTRICK—Abbott Pet. Co.'s 1, 2-30-21, sd 1940. Lacy Esper Pet. Co.'s 1, 18-19-22, sd 3265. McKittrick Oil Co.'s 1, 18-30-22, pulling 6⅝-in cas, td 3250 ft. Ozena Oil Co.'s 1, 29-29-21, sd 1860 ft. Ridge Oil Co.'s 1, 13-30-21, sd 4045 ft.

MON BLUFF—Miocene Oil Co.'s 1, 34-27-28, rig. Shell's Glide 1, 3-28-28 dr hard sand 3681 ft. Union's Tribe 1, 28-27-28, 300 bbl well, td 1781 ft.

NORTH POSO CREEK—Bruce Frame's 1, 18-26-28, oil and gas showings 2145 ft.

CORRAL CANYON—Shell's 1, ne¼, 16-26-28, new lcn.

SHALE HILLS—Huntington & Hawthorne's 1, 35-26-18, sd 600 ft. Nelson & Mountford's 1, 18-27-29 sd 2690 ft. Oildale Oil Co.'s 1, 13-27-18, sd 560 ft.

SUNSET—Fresno-Sunmaid Oil Co.'s 1, 16-11-24, sd 2400 ft.

TEMBLOR—Fortuna Oil Co.'s 1, 28-32-13, sd 2660 ft. Salegna Investment Co.'s 1, 36-29-20, sd 600 ft.

TEHACHAPI-MOJAVE—C. R. Asmussen's 1, 23-11-11, sd 1510 ft. Crusaders Oil Co.'s 1, 21-10-10, trying to put on pump 2367 ft. J. B. Harding's 1, 5-10-10 sd 1050 ft.

WASCO—Main Oil Co.'s 2, 28-27-24, will resume dr, td 5270 ft.

SANTA BARBARA COUNTY

GOLETA—Barnsdall Oil Co.'s Edwards 2, good oil showings 1890 ft. Graham-Loftus Oil Co.'s Orella 1, sd 1600 ft. J. J. Rekar's La Patera 1, dr 1909 ft.

BUELLTON—Buttram Bros.' Odin 1, sd 1970 ft.

ORCUTT—G. O. Gorham's 1, 33-10-34, lcn.

SANTA BARBARA—H. R. Dabney's Wright 1, sd 135 ft. Petroleum Exploration Co.'s P. M. 1, dr hard sand 250 ft. Channell O. & Dev. Co.'s 1 dr brown shale 5986 ft. Hollywood Oil Corp.'s Sudden 1, sd 1300 ft.

SUMMERLAND — Summerland Oil Co.'s Becker 1, trying to locate water, td 3030 ft.

VENTURA COUNTY

CAMARILLO—Standard's Camarillo 1, considerable oil in hole, td 5720 ft.

FILLMORE—Keck Investment Co.'s Rancho Sespe 1, 16-in cas cmt on bottom 1200 ft. J. W. Hackworth's McDonnell 1, rigging up. Sespe Oil Co.'s Smith 2, sd 4005 ft.

HOPPER CANYON—Ruth J. Bishop's 2, 35-5-19, rigging cable tools 200 ft.

MOORPARK—E. A. Parkford's Lloyd 1, rigging up to resume dr, td 4005 ft.

RINCON—Montecito Oil Producers' 1 13-4-25, dr gray sand 3571 ft. Scott Petroleum Properties' 1, 35-4-25, dr brown shale 2017 ft. (Note: All Rincon drilling wells in main part of field will not be treated in future as wildcats.)

SANTA PAULA—W. W. Bryant's Anlauf 1, co 1690 ft. Meriam Pet. Co.'s Anlauf 1, pumping some oil, td 1330 ft.

SIMI—Shell's Berylwood 1, failed to produce on production test 6075 ft; Strathern 1, dr hard sand 1660 ft.

SOUTH MOUNTAIN—Ring Pet. Corp.'s Converse 1, running 4¾-in cas 3950 ft.

SULPHUR MOUNTAIN—Bradford & Greis' 1, 21-4-22, dr brown shale and oil sand 2375 ft. E. L. Miley's Casitas 2A, co 616 ft td 755 ft.

VENTURA — Associated's Dabney-Lloyd 1, sdtr 6340 ft, td 6990 ft. Star Pet. Co.'s Star-Canet 1, running 8¼-in cas 4360 ft.

MISCELLANEOUS

KINGS COUNTY—Associated's Smith 1, 12-23-18, sd 2045 ft. Bolsa Chica Oil Co.'s 1, sd 3500 ft. General Pet. Corp.'s Burbank 1, sd 3105 ft; C2, 22-26-18, dr 5770 ft. Milham Explo. Co.'s Elliott 1, 2-22-17, dr brown shale 6250 ft. Monocline Dev. Co.'s 1 7-21-21, sd 4310 ft. Hugh McPhail's 1, 13-24-18, sd 2090 ft. South

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Coalinga Oil Co.'s 1, 35-24-19, co 2900 ft, td 2920 ft.

COLOUSA—Continental Oil Co.'s 2, 31-18-4, dr black shale 4166 ft.

MADERA COUNTY—Fort Wayne-Madera Synd.'s 1, 22-10-17, fsh for dr pipe 2250 ft.

SAN LUIS OBISPO COUNTY—Miley Oil Co.'s 1, 15-29-17, dr 2502 ft. Richfield Oil Co.'s 1, 10-29-17 tdtr 2600 ft. Union's 1, 34-32-15, rig. Waklin Pet. Co.'s 1, 27-27-11, dr 2556 ft.

SAN MATEO COUNTY—Shell's Cowell 1, 8-6-5, dr hard sand 5313 ft.

SANTA CLARA COUNTY—Continental Oil Company's Sargent 2, 31-11-4, testing oil sand from 1180 to 1225 ft, td 1450 ft.

SONOMA COUNTY—Shell's Murphy 1, 8-5-7, abn 6380 ft. Mossi 1, 8-5-7, dr 313 ft.

TULARE COUNTY—Birch Oil Co.'s 1 13-21-26, dr 3115 ft. Ducor Drilling Co.'s 1, 29-23-27, sd 4160 ft. Federal Explo. Co.'s 1, 15-22-24, cmt 6¼-in cas 5240 ft to test sand, td 5760 ft. J. E. Neame's 1, 24-17-24, sd 2025 ft.

MOUNTAIN STATES

NEW MEXICO

CHAVES—Gibson Oil Corp.'s Forsyth 1, 8-11-23, sd at 672 ft. Buffalo-Roswell 1, 24-11-27, sd 4300 ft. Arena Oil Co.'s 1 18-13e-31e, stand-in at 835 ft. McQuigg Bros.' Neis 1, 7-5w-29e, standing at 1550 ft.

CURRY—Hasson Pet. Co.'s Laird 1, 22-8-36, spd and sd. Clovis O. & G. Co.'s Hoskinson 1, 21-3n-36, dr 3775 ft.

GUADALUPE—Hanchett Oil Co.'s Rutherford 1, 24-8-24, bottomed at 4300 ft. Union Pet. Co.'s McMullen 1, 24-5n-16, sd 235 ft. Navajo Oil Co.'s Goard 1, 10-31-7, standing at 2538 ft.

LEA—Midwest Ref. Co.'s State 1, 9-19s-38e, dr 1450 ft.

McKINLEY—Smart & Reid 7-17-9, rig. Inland Oil Corp. 22-18-10, dr 890 ft. S. Dysart 1, 21-14-9, dr 1560 ft. Continental Oil Co.'s Carrica 1, sw 9-17n-7w, dr 2900 ft. Jenkins Oil Co.'s 1, 1-16n-9w, sd 1280 ft. Williams et al's 2, 30-18n-8w, standing with hole full of water at 860 ft. Reliance Oil Co.'s Valentine 1, 16-17-9, dr 1090 ft.

QUAY—Gibson Oil Corp.'s 1, 25-8-32 operations to be resumed at 3500 ft. Ohio Oil Co.'s Jordan Ridge 1, 24-7-29, dr 4800 ft.

SAN JUAN—Continental Oil Co.'s Munoz 17, 2-28-19, dr 4155 ft. Kansas-Colorado Oil Co.'s Atterberry 1, 23-31-11, fsh tools at 1850 ft. T. C. N. Oil Co.'s Lanier 1, 9-29-11, sd 547 ft. Huntington Park Oil Co.'s 2, 29-30-9, co at 4151 ft. R. M. Smith's Abrams 2, 23-29-11 standing at 532 ft. Huerfano Oil Co.'s Wiltbank 1, 25-29-11, standing at 800 ft. Union Oil & Mining Co.'s Pine 2, 8-29-9, fsh, td 2950 ft. San Juan Pet. Corp.'s 1, 9-29-n-13w, dr 1000 ft. A. Johnson, Tr.'s 1, 34-29n-11w, dr 550 ft.

SOCORRO—Abo Oil Co.'s 1A, 14-3s-6e set 12½-in at 600 ft and shut down.

TORRANCE—Duran Dome Oil Co.'s 1, 31-2-14, sd 1500 ft. F. G. Wilson, Tr.'s Nace 1, 12-6n-27, standing at 2215 ft. Bluhall O. & G. Co., 20-6n-10e, standing at 667 ft. San Juan Pet. Co.'s Randall 2, 26-6n-10e, fsh bit 4945 ft. San Juan Pet. Co.'s Minerman 1, 31-7-10, abn at 2650 ft.

VALENCIA—Acme Oil Co. 26-6-3, dr 2203 ft. Stone et al, 25-7-2, sd 1967 ft, financial difficulties.

COLORADO

ARCHULETA—Kansas-Colorado Oil Co., 17-34-2w, will resume at 1300 ft.

BACA—Phillips-Jones' 1, 26-34s-48w, may skid derrick.

BOULDER—Left Hand Oil Co.'s Prechtl 1, 34-3n-70, run 3-in to 1998 ft. Essok Oil Co.'s Martin 1, 5-1s-70, undrr to 5225 ft. Repollo Oil Co.'s Nicholas 1, 32-1n-70w dr 5250 ft.

EL PASO—Grand Union Oil Co.'s No. 2 John, Jr., 19-17s-67w, dr 775 ft.

FREMONT—Fremont Leasing & Holding Co.'s 1, 2-19-70, fsh. Columbia Oil Co.'s Sheridan 1, 20-18-70, sd at 2240 ft.

HUERFANO—Kinney-Koastal Oil Co.'s Pine 1, 24-26s-68w, sp 35 ft.

JACKSON—North Park Oil Co.'s Goettler 1, 9-6n-82w, standing at 506 ft.

LAS ANIMAS—Parker Club, Inc.'s Adams 1, 32-34-55 dr 3817 ft. Foney & Goldsworthy 1, Govt. 11-30-60, standing 2010 ft. Reiter-Foster & Phillips Pet., 23-29s-56, sp at 130 ft.

LA PLATA—East Long Beach Oil Co.'s Aspaas 1, 10-34n-11w, set 10-in at 902 ft. Detroit Oil Assn.'s Olbert 1, 9-35-12w, shut down at 1375 ft.

LARIMER—Five Square O. & G. Co.'s State 1, 16-4n-69w, dr 305 ft.

LAS ANIMAS—Model Dome Synd.'s Government 1, 11-30s-60w, standing at 3830 ft.

LOGAN—Northeastern Colorado Oil Co.'s State 1, 36-8n-55w, dr 5460 ft.

MOFFAT—Ohio Oil Co.'s Kuykendall 1 22-21n-11w, sd for winter. Reiter-Foster Oil Co.'s State 1, 16-12-100, water showing at 2220 ft, will drill deeper. Yarg Producing & Refining Co.'s 205, 26-4n-92w, dr 3005 ft. Alliance Oil Co.'s Milliken 1, sp at 115 ft.

MONTEZUMA—Coon & Cotton's Hall 1, 9-35n-13w, dr 1245 ft.

MONTROSE—Indian Pet. Corp.'s Gilmore 1, 4-45-16w, dr 4200 ft.

RIO BLANCO—Texas Prod. Co.'s Freeman 1, 27-3-94, dr 5250 ft. Argo Oil Co. sw 9-2s-96w, sp.

ROUTT—Great Western Oil Co.'s State 1, 17-60n-56w, standing at 1700 ft.

WELD—Platte Valley Pet. Corp.'s Patterson 1, 24-6n-61w, dr 3530 ft.

WYOMING

BIG HORN—Agate Oil Co., ne 13-51-92, plugged back and cemented at 842 ft. Utah-Southern Oil Co.'s 3, 29-56n-97w, dr blue shale 2422 ft. Wisconsin-Himes, 9-54-94w, delayed by little difficulties.

CARBON—Graybeal Synd., 16-28-91 sd 4380 ft. Pacific-American, 31-25-91, lcn.

CONVERSE—A. E. Tylee, ne 8-32-72, sd. Criterion Oil Co.'s Irvine 1, 5-31-70, coring 3630 ft. John Ackard, McKinley 1, 21-31-69, sd at 3000 ft.

FREMONT—Producers & Refiners' Muskrat 1, 34-34-92, dr 2033 ft. Texas Prod. Co.'s Alkali Butte 1, 1-33-92 dr below 1367 ft. Zola Oil Co.'s Crook's Gap 1, 25-27n-93w, sd 3750 ft. Iowa-Wyoming Inv. Co., 30-1s-2e, bottomed at 1500 ft.

JOHNSON—Fairway Oil Co.'s Crazy Woman 1, 7-47-82, td 2100 ft. Tarrant Synd.'s 2, 17-46n-82w, sd 3625 ft. Murphy & Grove, 10-41n-80w, will abn and start new hole.

LINCOLN—Fontenelle Oil Co.'s 1, ne ne 1-24n-113w, dr below 1125 ft. California Co.'s Snyder Basin 1 11-29n-115w, td 915 ft.

NATRONA—North Casper Creek O. & G.

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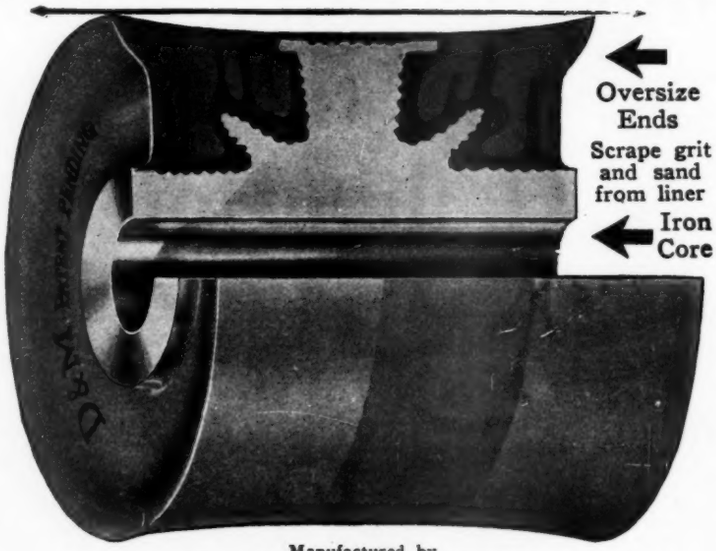


LET OUR EXPERTS LOOK INTO YOUR PUMPING PROBLEMS SEMINOLE

For Sale at All Supply Stores

Manufactured by
D. & M. MACHINE WORKS
Lomita, California

Mid-Continent Distributor

TEXAS RUBBER SPECIALTY CO., Houston, Texas

OIL WELL SUPPLY COMPANY, EXCLUSIVE FOREIGN DISTRIBUTORS

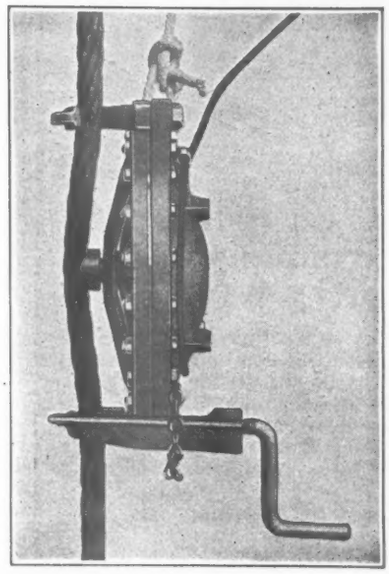
Martin-Loomis
Automatic
Recording Weight Indicator

No Moving Parts

No Wear

Extreme Simplicity

Maximum Accuracy



Bronze Case Containing Rubber Diaphragm Attached to Dead Line

All Bronze

Easily Installed

Fool Proof

Internationally Used

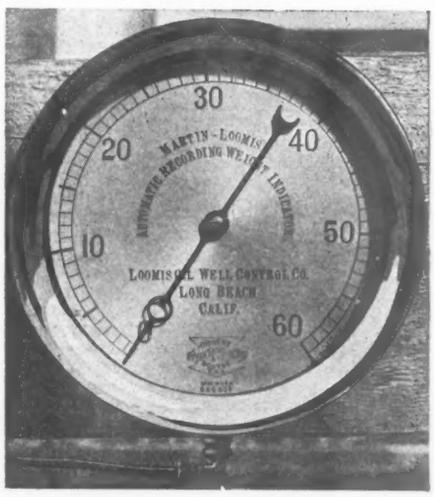
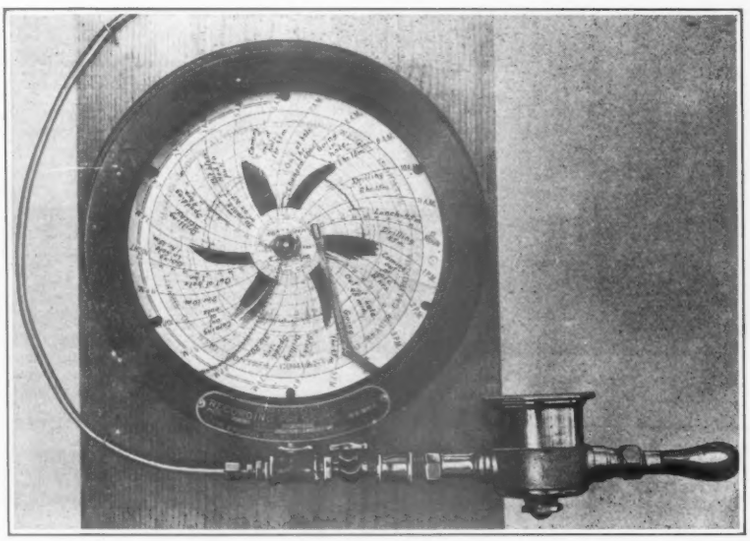


Fig. 3—Gauge used in conjunction with weight indicator placed in easy view of the driller



Showing details of 24-hour day drilling record as recorded through weight indicator

MARTIN-LOOMIS CORPORATION

568 East Willow Street **Long Beach, Calif., U. S. A.**

Export Representatives
OIL WELL SUPPLY COMPANY

Mid-Continent Representatives
REED ROLLER BIT CO., HOUSTON, TEXAS

Say you saw it in The OIL WEEKLY

JONES & LAUGHLIN
Quality
SEAMLESS
STEEL CASING

J&L PIPE

Quality is a prime requisite in pipe for oil country work.

The quality of J. & L. Pipe is of the highest standard, positively controlled from mining of the ore to the final testing of the finished product by an organization that has had three-quarters of a century of experience in the fabrication of iron and steel.

We are now ready to promptly supply your requirements for J. & L. Seamless Steel Pipe in all sizes for oil country service.

A. P. I. Specifications

Uniform Wall Thickness, Physical and Chemical Properties

Strong, Accurate Threads

Seamless Steel Couplings, Carefully Checked for Alignment

Every Operation of Manufacture Subjected to Rigid Tests

BAASH-ROSS TOOL COMPANY
3113 BOYLE AVENUE PHONE MIDLAND 2170
LOS ANGELES CALIFORNIA
BRANCHES
LONG BEACH · · · BREA · · · VENTURA · · · TAFT · · · ROSECRANS
HOUSTON, TEXAS

BRONZE TO BRONZE
Is the Reason

DART UNIONS
Give Service
Try them

E. M. Dart Mfg. Company
PROVIDENCE, R. I.

The Fairbanks Company
Distributors

Co., se 1-36-82, no report. Combs Inv. Co., 12-39-78, dr blue shale, 1460 ft, hole full of water.

NIOBRARA—Penn-West. Pet. Co., 13-35n-62w, will resume in the spring, td 800 ft. Hillingsworth Bros., 17-39-79, fsh tools at 1710 ft.

PARK—Union of California's Taylor 1, 22-47-101, dr 3343 ft. Fred G. Ostland's Hoodoo Ranch 1 25-51-101, sd 1740 ft. Honolulu Oil Corp.'s Four Bear 1, 29-48-103, fsh 2846 ft. Ralph Arnold & Chas. Mau, nw 25-58n-98w, delayed. Ydoc Oil Co., ne 6-51n-101w, dr 1980 ft. Honolulu Oil Corp.'s Pitchfork 1, 14-48n-102w, lcn. Hoodoo Oil Co., 36-51-101, dr 155 ft with crooked hole.

PLATTE—Walter Adams, Tr., sec 13-25-66, dr 1700 ft.

SWEETWATER—Boar's Tusk Oil Co. 16-23-104, artesian water at 1450 ft. Prairie O. & G. Co.'s Tucker 1, 18-13-99, sd 150 ft. P. & R. Marland of Colorado, 26-20-104, sd 485 ft. Tower Pet. Co.'s 1, 6-14n-103w, dr 400 ft.

WASHAKIE—P. & R. Corp.'s Tensleep 1, 13-46-89, dr ahead from 3345 ft.

WESTON—Unnamed persons, ne 15-44-64, dr suspended for the winter at 600 ft. Gose Synd.'s 1, ne 28-47n-65w, attempting to pull 4¾-in at 4850 ft.

UINTA—Uinta Oil & Dev. Co. 21-15n-120w, set 10-in at 1300 ft, gas and oil showing.

MONTANA

BIG HORN—Selig Oil Co.'s 1, se 21-6s-35, dr below 700 ft.

CARBON—Ohio Oil Co.'s Northern Pacific 1, 11-75-21e, dr 3495 ft. Atlantic Oil Co.'s 3, 20-7s-24e, casing cemented at 948 ft.

CASCADE—Lone Star's McLean 1, 12-21n-3e, sd 100 ft.

CHOTEAU—Feralding O. & G. Co., sw ne 1-21-11e, rigged ready to spud.

FERGUS—Melton Corp.'s Fenholt 1, 24-21-17, dr below 2290 ft. Mineral Research Co.'s 1 13-17-23, bottomed at 843 ft.

FLATHEAD—Flathead Pet. Co.'s Reservation 1, se 35-23-22w, rig.

GARFIELD—Carrol & Parkinson, 6-14n-31e, running 5 3-16-in to 1420 ft.

GLACIER—Rimrock Oil Co., 29-35-5w, rig.

HILL—A. H. McFarland, sw 15-30-13e, sd 100 ft. Gad-Hamilton et al's Goldston 1, sw 25-35-9e, rig. Equitable Oil Co.'s Perkins 1, 34-33-12e, bottomed at 3330 ft.

LIBERTY—Chester Oils, Inc.'s Laird 1, 31-37n-6e bottomed at 2020 ft. Sunburst O. & R. Co.'s Disotell 1, 10-37n-5e, bottomed at 2400 ft.

MADISON—Madison County Oil Co.'s 1, ne 17-7s-1w, sd 1700 ft.

MUSSELSHELL—Manhattan Oil Co., ne 24-7-24e, sd 60 ft. McElwain Oil Dev. Assn., 2-11-22, rig.

RICHLAND—Community Drill. Co.'s Pioneer 1, rigging to drill deeper from 2600 ft.

ROOSEVELT—Pioneer O. & G. Co.'s 1, se 35-27-51w, sd 1590 ft.

PONDERA—S. C. Ferdig et al, 8-27-4w, rig. Continental Dev. Co., sw 19-27-3w fsh 1000 ft.

PHILLIPS—Big Dome Oil Co.'s Bloomberg 1, ne 1-32-32e, dr below 1000 ft.

SWEETGRASS—Shoshone Consolidated, nw 23-2n-15w, casing trouble at 2100 ft.

TETON—Dilling et al, ne 9-25-1e, fsh at 1408 ft. Continental Dev. Co.'s Ritmoure 1, 8-27-5w, bottomed at 900 ft. Craig-Speer-McCutcheon, 9-23-2w, sp and shut down, bad weather.

TOOLE—Kevin-Flathead Oil Co.'s 1, ne 27-36n-2e, sd 2200 ft. Zenith-McDonald's Lowery 1 35-36n-1w, bottomed at 2135 ft. Sunburst O. & G. Co.'s Grandview 1, 10-34n-32, rig. Madeline Oil Co.'s Swenson 1, 33-35-4w, bottomed at 550 ft.

SOUTH LOUISIANA

Completions

Company, Well and Location	Initial Production Bbls.	Depth
TERREBONNE PARISH—		
Southern Gas Co., South Down 3..	*	2445

ASCENSION PARISH—Gulf's United Lands Co. 4, Sorrento Dome, dr.

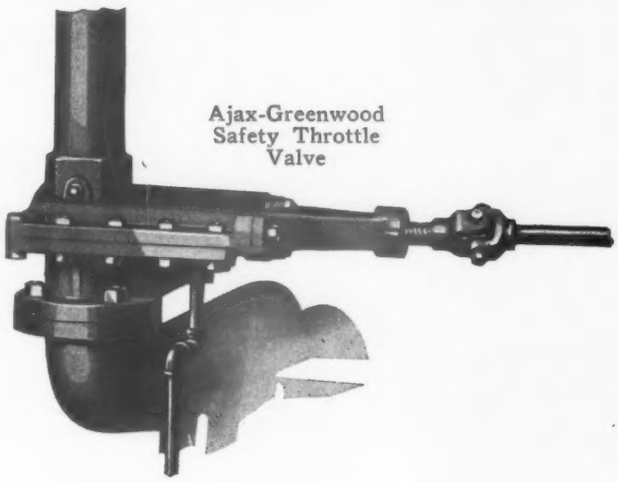
CALCASIEU PARISH — Union Sulphur Co.'s Fee 722, Sulphur Dome, waiting for rig. Newton Drilling Co.'s Dupre 1, Lake Charles, sd 2720 ft.

CAMERON PARISH—Pure Oil Co.'s Sweet Lake 2, Sweet Lake, sd; Sweet Lake 3, Sweet Lake flowed 1100 bbls through ½-inch choke; Sweet Lake 4, Sweet Lake, dr 5495 ft water

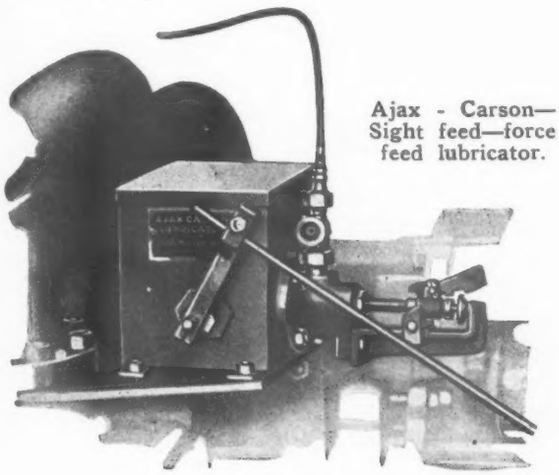
Two AJAX Accessories That Make Any Steam Engine Better

Ajax-Greenwood Safety Throttle Valve

Many accidents have occurred in the past when steam pressure in drilling engine cylinders has built up and turned the engine over unexpectedly after the operator has shut off the power. The Ajax-Greenwood Safety Throttle Valve prevents this by automatically bleeding the steam chest and manifold.



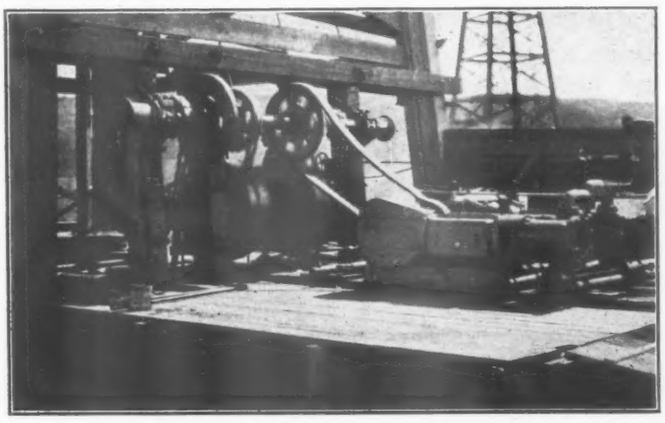
Ajax-Greenwood Safety Throttle Valve



Ajax - Carson—Sight feed—force feed lubricator.

Ajax-Carson Lubricator

The Ajax-Carson Lubricator is positive in action—valveless—free from trouble. It runs at the same rate as the engine, forcing more oil into the steam line as speed is increased. Sight feed shows oil in motion, not simply a reservoir.



Ideal-Ajax twin engine at Cushing, Okla., equipped with Ajax-Carson Lubricator and Ajax-Greenwood Valve.

Made by

AJAX IRON WORKS

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DISTRIBUTED BY

THE NATIONAL SUPPLY COMPANIES

In every oil field

AJAX ENGINES

Say you saw it in The OIL WEEKLY

10¾-in. size to run in 11-in. casing. Cuts 1¼-in. larger (11⅞-in.) hole.

MacClatchie Rotary Under-reamer

Patent Pending

Here it is—A positive expansion rotary under-reamer, simple and strong, with far more cutting surface than any other under-reamer in use today.

The MacClatchie Under-reamer is as easy to run in and out of the hole as a roller bit. It operates on the principle of a governor, automatically expanding when rotated to the right, and automatically closing with a quarter turn to the left. Materials used in its construction are the best obtainable throughout.

If you want faster reaming jobs and better hole at less expense, try the MacClatchie Rotary Under-reamer. We will gladly supply records of actual field runs and names of many satisfied users.

For Sale or Rent by

MacCLATCHIE MANUFACTURING COMPANY
Manufacturers of
OIL WELL TOOLS
COMPTON, CALIFORNIA
or at your supply house

CARBON (BLACK DIAMONDS) FOR DIAMOND CORE DRILLS

—IMPORTERS—
INDUSTRIAL DIAMONDS
—MANUFACTURERS—
DIAMOND POINTED TOOLS FOR ALL MECHANICAL PURPOSES

WRITE OR WIRE FOR CATALOGUE AND FULL PARTICULARS
THE DIAMOND DRILL CARBON CO.
58 PARK ROW, NEW YORK, N.Y. CABLE ADDRESS, CREDOTAN, N.Y.

sand; Sweet Lake 5, Sweet Lake, dr 5480 ft gbo and lime. Louisiana Land & Explo. Co.'s Calcasieu Lake A-1, dr below 1370 ft. Calcasieu Oil Co.'s Olevia 1, Kelso Bayou, dr 3928 ft gbo and lime; Watkins 1, Kelso Bayou, set 10-in cas at 865 ft. Yount-Lee Oil Co.'s School Lands 7, dr 3445 ft.

IBERIA PARISH—La. Land & Explo. Co.'s Vermilion Bay A-1, 3¼ mi sw of Cypremont Point, set cas at 558 ft; Avery 1, Avery Island lcn. Gulf's Brussard 1, Loreauville, dr below 4725 ft; State Z-3, Loreauville, dr below 1185 ft. Jefferson O. & Dev. Co.'s Jeff Island Salt Co. 2, dr 1195 ft gbo.

IBERVILLE PARISH—Roxana's Wilbert 1, White Castle Dome, r, td 1580 ft. Union Sulphur Co.'s Wilbert 1, Bayou de Glaise, dr 910 ft gbo; Schwing 1, Bayou Blue Dome dr 1500 ft gbo.

JEFF DAVIS PARISH—Estropal Oil Co.'s Le Doux 2, sd 2980 ft rock. John Carrodine et al's Walsh 1, Welsh, sd 1355 ft. Eunice Welch Oil Co.'s Walsh 1, Chacahoula dome, setting strainer 1240 ft.

LA FOURCHE PARISH—Gulf's Stark et al 2, Thibodaux, dr 400 ft.

ST. MARTIN'S PARISH — Rycade Oil Corp.'s Atchafalaya 1, fsh for stuck drill pipe at 3916 ft; Atchafalaya 2, dr 550 ft sand.

ST. MARY PARISH—Jacob Dannebaum's Viguerie 1, Grand Lake, lcn.

TERREBONNE PARISH — Southern Gas Co.'s South Down 3, abn at 2445 ft; South Down 4 300 ft e of No. 3, dr 1330 ft sand and shale.

TEXAS

GULF COAST

Completion

MONTGOMERY COUNTY—
Brain et al, Fitch A-1, 3 mi e of Spring ..... * 3700

AUSTIN COUNTY—Humble's Gotosky 2, Raccoon Bend, dr 2724 ft shale; Stravoski 1, Raccoon Bend, fsh 1021 ft. Alexander & Lyles' Goebel 1, sd 1300 ft. L. H. Weadock's Ward 1, dr 300 ft sand.

BRAZORIA COUNTY—Roxana Pet. Corp.'s Allen Bernard 1, Allen Dome, producing 30 bbls oil; Allen 4, Allen Dome td 4864 ft, sdtr at 4800 ft; Randon 1, Allen Dome, milling out back pressure valve, td 4460 ft; Bell 2, Clemons Dome, dr 5274 ft shale and lime. Gulf's Perry 3, Stratton Ridge, dr 4050 ft. Stark et al's Hinckle 3, Hinckle Ferry, dr 1760 ft gbo.

CHAMBERS COUNTY—Pure Oil Co.'s Lost River 1, Lost Lake Dome, dr 2485 ft.

COLORADO COUNTY—Rich Oil Corp.'s Von Rosenberg 1, about 2½ mi s of Columbus dr blue sticky shale 884 ft.

FORT BEND COUNTY—Gulf's Beard 2-A, Long Point, dr 3980 ft; Moore 14, Moore's Field, dr 3668 ft. Sun Oil Co.'s Kasparek 1, Boling, dr below 2390 ft; J. R. Farmer 5, Boling, ru; H. R. Farmer 3, Boling, dr 1135 ft gyp and sulphur; H. R. Farmer 4, Boling, standing. Humble's Sugarland Industries 1, Sugarland dr 572 ft gbo. Gulf's 7, Long Point, dr 650 ft; Trone 6, Long Point, dr 825 ft.

HARRIS COUNTY—Dr. P. S. Griffith's Fee 2, 12 mi n of Houston, sd 3517 ft. Juanita Oil Co.'s Kitsman 1, 3 mi n of Cypress, sd 1180 ft. Humble-Marland's Warren 2, Hockley, dr 3810 ft sticky shale.

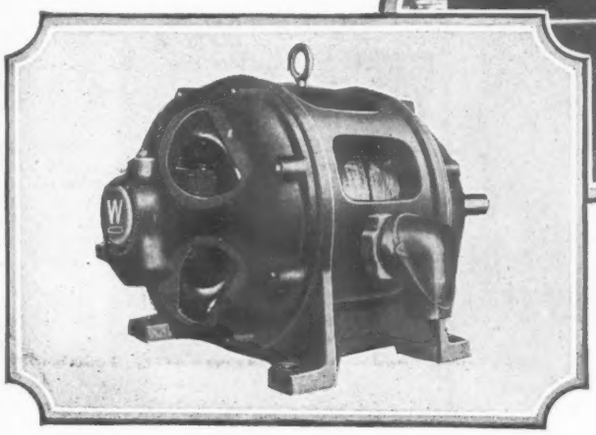
JEFFERSON COUNTY—Deep Test Oil Co.'s McFaddin 1, 4 mi n of Spindle Top, sd 2175 ft. Gulf's Bordages 4, Fannette, dr 4514 ft. Southern Spindle Top Oil & Dev. Co.'s Young 1, 1 mi w of Nederland, sd 3350 ft. Jim McMurry's Crosby 2 5 mi ne of Port Arthur, ru. Port Arthur O. & Dev. Co.'s West 4, Westbury, sd 2925 ft.

LIBERTY COUNTY—Harrison Oil Co.'s Quintette 2, temp abn 4602 ft. The Texas Co.'s Havard 1, Davis Hill, dr 4338 ft hard sand; Green 1, S. Liberty, building dk. Barlow et al's Minchcliff 1, 2½ mi ne Cleveland, sd 2215 ft. Yount-Lee Oil Co.'s Mitchell 1, dr 2790 ft. Deering & Kayser's Pruett 1, N. Dayton, dr 2550 ft.

MATAGORDA COUNTY—Gulf's Sanborn 4, Hawkinsville, drilling; Sanborn 5 lcn. Matagorda County Dev. Co.'s Hawkins 1, Bay City, sd 1985 ft.

MONTGOMERY COUNTY—Brains et al's Fitch A-1, 3 mi e Spring, abn at 3700 ft.

WHARTON COUNTY—Gulf's Abendrath 3, Boling, completed, pumping 100 bbls at 1450 ft.



Powered *for* Production

THE efficiency of the air-gas lift principle for stimulating production is chiefly a question of equipment—properly designed and properly applied equipment.

This was quickly recognized in Westinghouse equipment when wells ceased to flow in the Seminole field. While the use of air-gas lifts was a relatively new method of increasing production, experiments and tests were not necessary to definitely establish the reliability of Westinghouse motor equipment for compressors. Twenty-four hours a day it works—and every day. Furthermore, it promotes substantial savings in power consumption.

Sealed Sleeve bearings, permanent insulation and indestructible rotor—these are characteristics that prolong the life of the motor and make for lower maintenance costs. The Sealed Sleeve bearings are found only in Westinghouse motors. Oil cannot reach the windings to cause breakdowns, nor can dust or grit get into the bearing.

W WESTINGHOUSE ELECTRIC

MOTORS *for* Compressor Drive

Westinghouse Electric & Manufacturing Company
East Pittsburgh Pennsylvania
Sales Offices in All Principal Cities of the United States and Foreign Countries

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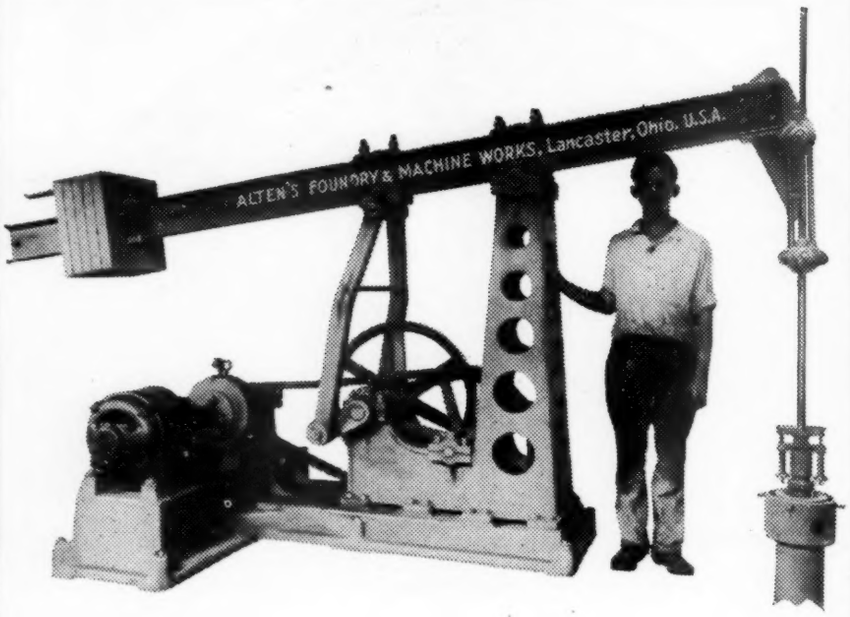
Say you saw it in The OIL WEEKLY



Pump Your Wells With Individual Powers

ALTEN S Single Well Pumping Powers are made as a complete unit furnished with an electric motor, oil or gas engine—or made with just a pulley so you can use your own power. They are carefully made with steel castings and heat treated steel pins used where strength is most needed, and can be mounted on a cast iron or structural steel base, if desired. Constructed to meet the ideal of quality and service that is characteristic of all Alten products.

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ALTEN'S

Foundry & Machine Works

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There is Over 1,000,000 Feet of

JONES A. P. I. SPECIFICATION **SUCKER RODS**

Now In Use

"High Manganese" RODS

Made in Both Box and Pin and Double-Pin Types

S. M. JONES COMPANY, Toledo, Ohio

TULSA OFFICE: 602 WRIGHT BLDG.

WEST TEXAS

ANDREWS COUNTY—Carter-Zweifel et al's Cowden 1, sd 5000 ft. J. S. Cosden et al's Bedford-Ratliff 1, sd 4116 ft. Calvin-Belt et al's Bedford-Ratliff 1, elev 3194 ft, top salt 1610 ft, sd 4003 ft. Deep Rock Oil Co.'s Harris 1, elev 3173 ft, dr 1430 ft. C. B. McKennon et al's Means 1, elev 3144 ft, sd 1680 ft.

BORDEN COUNTY—Dixon Creek Oil Co.'s Clayton-Johnson 1, lcn. Marland Oil Co.'s McDavid 1, dr 1380 ft.

BREWSTER COUNTY — Cowden-Bowser's Jackson-Harmon 1, dr 125 ft. J. M. Hickey et al's Jackson-Harmon 1, sd 925 ft. Van McPhail et al's McIntyre 1, sd 1210 ft. Mid-Kansas O. & G. Co.'s Turney 1, dr 2665 ft. Reese & White's Kimball 1, ur 1305 ft. Wilcox-Anderson's Gage 1, sd 1855 ft.

COKE COUNTY—Danciger O. & R. Co.'s Byrne 1, dr 3385 ft. Lipan Oil Co.'s Conner 1, sd 3315 ft; Rawlings 1, sd 2736 ft.

CONCHO COUNTY — Exploration Co.'s Hartgrove 1-A, sd 875 ft.

CRANE COUNTY—Crane Co. Dev. Co.'s Mosley-Brookfield 1, sd 850 ft. Gulf Prod. Co.'s Waddell 3, elev 2724 ft, top salt 1165 ft, show gas 2400 ft, dr 2705 ft.

CROCKETT COUNTY—J. S. Cosden et al's Paul Perner 1, sd 615 ft. Dixie Oil Co.'s Thompson 1, lcn. W. W. Donnelly et al's Shannon 1, sd making gas 1664-80 ft. Osage Oil Corp. et al's Halff 2, rig. C. E. Simmons & Co.'s Halff 1, elev 2152 ft, dr 1265 ft. World Oil Co.'s Schneeman 1-B, elev 2663 ft, dr by junk 2330 ft.

CULBERSON COUNTY—Deep Rock Oil Co.'s T&P Fee 2, sd 1210 ft; Seay 1, spd and sd. Dittman Drilling Co.'s Millers 1, dr 680 ft. Jas. Gardner et al's Radford 1, sd 635 ft.

JEFF DAVIS COUNTY—Humble O. & R. Co.'s C. Flores 1-A, dr 3310 ft. E. L. Smith Oil Co.'s Means 2, crooked hole 2600 ft.

EL PASO COUNTY—Ellsworth & Haunt's McKinney-Jones 1, lcn.

FISHER COUNTY — Cranfill-Reynolds & Sun Oil Co.'s Young 1, fsh 2875 ft. Ideal Oil Co.'s Jameson 1, sd 3461 ft. Marland & Vacuum Oil So.'s Lagow 1, ur 3670 ft. The Texas Co.'s Dan Stephens 1-A, (Sec. 79, blk 1, H&TC sur) elev 1937 ft, top lime 3190 ft, testing 38 degree gravity oil in hole from lime pay 3238-40 ft.

GARZA COUNTY—Gulf's Swenson 1-A, elev 2492 ft, top salt 495 ft, top lime 2075 ft, set cas 3035 ft.

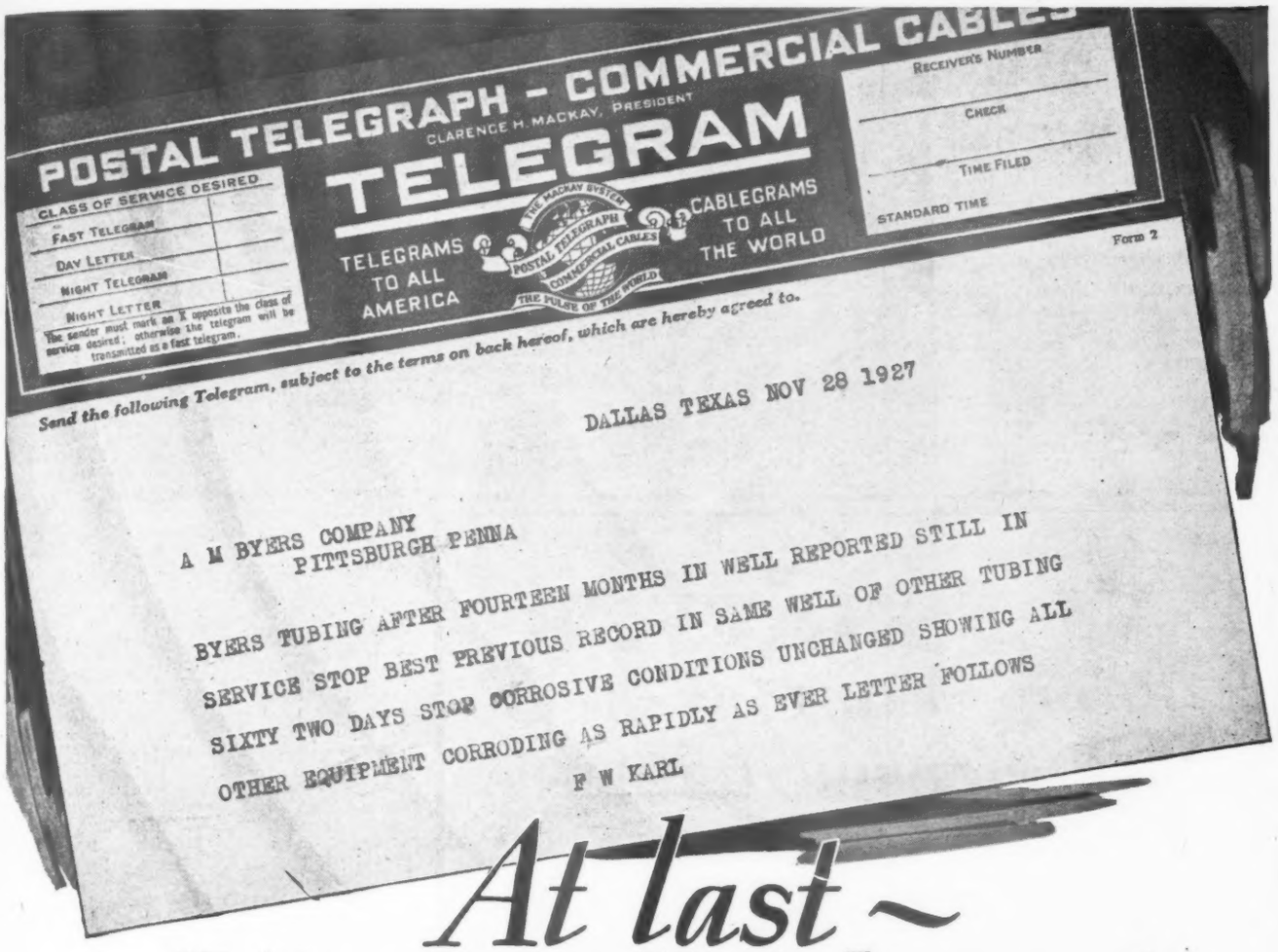
GAINES COUNTY—Westheimer & Daube's Forbes 1, sd 4900 ft.

GLASSCOCK COUNTY—Marland & Texon O. & L. Co.'s Settles 1, elev 2646 ft, top lime 2035 ft, dr 2650 ft.

TOM GREEN COUNTY—Cox et al's Llano 1, sd 470 ft. Haubelt et al's Johnson 1, sd 960 ft. Marland Oil Co.'s Johnson 1, dr 3190 ft; Johnson 1-A, fsh 2390 ft.

HOCKLEY COUNTY—World Oil Co.'s Ellwood 1, elev 3363 ft, sd 1450 ft.

HOWARD COUNTY—Bristow & Merrick's Roberts 1, spd and sd. The California Co.'s Fisher 1, elev 2623 ft, top lime 3065 ft, ur 3810 ft. Coyle-Concord Oil Co.'s Roberts 3, dr 1410 ft. Dixie Oil Co.'s Clay 1, sd 3325 ft. F-H-E Oil Co.'s Roberts 1-C, dr 1895 ft; Roberts 1-D, dr 1785 ft. Gulf Prod. Co.'s Chalk 4, spd. Godley O. & G. Co.'s Hooks 2, fsh 1794 ft; Hooks 3, rig. Henshaw & Co.'s Settles 1, sd 1900 ft. Lee & Neeley's H. Hyman 1, sd 1400 ft. Lockhart & Co.'s Roberts 1, dr 1515 ft. Magnolia Pet. Co.'s Mary-Chalk 9, testing oil pay 1650-77 ft; Sarah Hyman 4, dr 795 ft; Roberts 2, dr 1500 ft; Roberts 3, fsh 450 ft; Roberts 4, rig; Roberts 5, dr 235 ft; Roberts 6, dr 635 ft; Magnolia-Roberts 1, rig. Marland Oil Co.'s Clay 1-E, elev 2662 ft, cem hole 3656 ft; Richardson 1, elev 2359 ft, 2615 ft. Marland & Texon O. & L. Co.'s Connally 1, cem 6-inch cas 4146 ft; Settles 2-A, rig. Marland & F. P. Zoch's Jones 1, top salt 970 ft, dr 2745 ft. Mays & Nixon's Flowers 1, sd 1390 ft. Miley Oil Corp. & Marland's Read 1, spd and sd. Owen-Sloan Oil Co.'s Roberts 2, elev 2756 ft, top lime 2015 ft, dr 2655 ft; Roberts 2 and 3, lcns. Peer Oil Corp.'s Read 1, dr by junk 3215 ft. Schermerhorn Oil Co.'s Roberts 1, fsh cas 2320 ft; Roberts 1-A, dr 910 ft. Sprague Oil Co.'s Roberts 1, spd and sd. Sun Oil Co.'s Settles 1, dr 565 ft. Sweeney & Henry's Chalk 2, dr 1505 ft; Chalk 5, swab 150 bbls oil 1693-1710 ft. Vitek Oil Co.'s Clay 2, rig. World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CLARENCE H. MACKAY, PRESIDENT
TELEGRAM
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NIGHT TELEGRAM
NIGHT LETTER
TELEGRAMS TO ALL AMERICA
CABLEGRAMS TO ALL THE WORLD
RECEIVER'S NUMBER
CHECK
TIME FILED
STANDARD TIME
Form 2
Send the following Telegram, subject to the terms on back hereof, which are hereby agreed to.
DALLAS TEXAS NOV 28 1927
A M BYERS COMPANY
PITTSBURGH PENNA
BYERS TUBING AFTER FOURTEEN MONTHS IN WELL REPORTED STILL IN
SERVICE STOP BEST PREVIOUS RECORD IN SAME WELL OF OTHER TUBING
SIXTY TWO DAYS STOP CORROSIVE CONDITIONS UNCHANGED SHOWING ALL
OTHER EQUIPMENT CORRODING AS RAPIDLY AS EVER LETTER FOLLOWS
F W KARL

At last ~
Tubing Service Vastly Improved

The record referred to above is only one out of a great many showing the remarkable rust-resisting properties of Byers galvanized tubing.

At first blush, your thought will be that any galvanized tubing will give equally good service, regardless of what the best metal may be. Nothing could be further from the truth, as has been repeatedly shown in corrosion tests. The reasons are simple:

The surface of Byers Pipe is made very rough in the pickling process, soaking up zinc like a sponge, and holding it in a *vise-like grip*. This is most important, for zinc in itself is a brittle metal which with handling and wear tends to flake or peel off when applied on steel pipe.

MAKE THIS TEST!

Crush a piece of Byers galvanized pipe flat with a hammer, also a piece of steel pipe, and note how the galvanizing sticks to the former and flakes off the latter! In this difference lies the secret of the much greater durability of Byers galvanized tubing, compared with any other pipe not made of genuine wrought iron.

CAUTION!

Note: Do not confuse Byers with pipe made from so-called "iron," refined in open hearth furnaces. The latter contains no slag (which gives Byers its rough surface) and is, in fact, only good open hearth steel, of low carbon content, sold under various fancy names.

Write for further information.

A. M. BYERS COMPANY

Established 1864 Pittsburgh, Pa.

Distributors

Norvell-Wilder Hardware Co.
Jarecki Mfg. Co. Oil Well Supply Co.

the *Spiral Stripe* protects you against mistakes and substitution

Also look for name and year rolled in metal

BYERS GALVANIZED Tubing
GENUINE WROUGHT IRON

Oil Co.'s Roberts 1, dr 1775 ft. Weekly Oil Corp. et al's Roberts 1, dr 540 ft.

HUDSPETH COUNTY—Lockhart & Co.'s Moore 1, sd 905 ft; Gardner-Mosely 1, sd 975 ft.

IRION COUNTY—F. E. Webb et al's Nutt 1, spd and sd.

JONES COUNTY—E. P. Campbell et al's Herndon 1, co bridge after shot 40 qts 2451-2560 ft, td 3009 ft. R. F. Garland & Co.'s Glynn 1, sd 2430 ft. Hutson-Weaver et al's Smith 1-A, dr hfw 2260 ft. Phillips Pet. Co.'s Vestal 2, set cas 2320 ft; O. H. Pomroy 1, dr 140 ft. W. G. Stough et al's Bennett 1, sd 800 ft; Wallis 1, sd 1740 ft. Swensondale Oil Co.'s Canton 1, plug back from 3398 to 3060 ft for shot.

KING COUNTY—Humble's Pitchfork 1, ur cas 3435 ft. Pattison et al's Patton 1, sd 3410 ft.

LOVING COUNTY—Delaware Oil Co.'s Lockhart-Ramsey 1, rig. Owen-Sloan Oil Co.'s Johnson 1, top salt 955 ft, dr 1155 ft.

MENARD COUNTY—May-Clark et al's Callan 1, sd 345 ft. Renfro et al's Davis 1, sd 175 ft.

MIDLAND COUNTY—Gholson et al (was Orbit Oil Co.) Moreland 1, spd and sd. O. H. Shoup et al's Roy Parks 1, lcn.

MITCHELL COUNTY—Paul Teas et al's Mills 1, dr 815 ft.

NOLAN COUNTY—John Winemiller Corp.'s Arledge 1, dr 2705 ft.

PECOS COUNTY—Geo. H. Anderson et al's Sherbino 1, ur cas 685 ft. Buell-Hagan et al's Pryor 1, lcn. Cummings et al's Blackstone-Slaughter 1, sd 2528 ft. Day Bros. & McKnight's Yates 1, elev 2213 ft, sd 915 ft. Douglas Oil Co. & Roxana's Sellman 2, ur 700 ft. Bob Elmore et al's M. Holmes 2, machine. Everett et al's J. Fields 1, spd and sd. Gibson Oil Corp.'s Russell 1, dr 440 ft. Henshaw & Co.'s Corder 1, sd 970 ft; Sweatt-Hinyard 1, sd 2506 ft. Kershaw & Livingston's Cannon 1, rig. Kirby Pet. Co. & Edson Pet. Co.'s Harral 1, top salt 1005 ft, sd hfw 3025 ft. Robt. Lee et al's Parker 1, rig. Mid-Kansas O. & G. Co.'s Pryor 1, rig. Mid-Kansas-Transcontinental's Smith 2, sd 1045 ft; Yates 1-F, machine. Miller & McNees' Tyrrell 1, lcn. Moody Corp.'s Corder 1, elev 2996 ft, top salt 1120 ft, sd 1700 ft. Olean Pet. Co.'s Harral 1, sd 3521 ft. Oregon Oil Corp.'s Yates 1, rig. Phillips Pet. Co.'s Smith 1, rig. B. J. Spikes et al's Brown 1, spd and sd. Sun Oil Co. et al's Yates 1, spd. Transcontinental's Blackstone-Slaughter 1, elev 3539 ft, dr 4020 ft. Vacuum Oil Co.'s Elsinore 1, materials. World Oil Co.'s M. Cerf 1, elev 3435 ft, dr 445 ft; Kloh 1, elev 2810 ft, rig.

REAGAN COUNTY—Camp & Henshaw's University 1, elev 2772 ft, top salt 1130 ft, cem cas 2205 ft. Moody Corp.'s Walters 1, materials. Skelly Oil Co.'s University 1, elev 2895 ft, top salt 1340 ft, sd 2795 ft. J. T. White et al's Schafner-Sterling 1, top salt 1275 ft, dr 1580 ft.

REEVES COUNTY—Exploration Co.'s Kinney 1, sd 1340 ft. D. R. Thompson et al's Eddins 1, recovered bit, co 4170 ft. Grisham-Hunter Corp.'s Rathage-Conner 1, spd and sd. Vacuum Oil Co.'s Grisham-Hunter 1, rig. World Oil Co.'s A. L. Duff 1, elev 2774 ft, co after shot, td 3035 ft.

RUNNELS COUNTY—Empire G. & F. Co.'s Gray 1, sd 2365 ft. Gibson-Johnson et al's Harris 1, lcn. Serratt 1, rig. Griswold et al's Boyer 1, sd 375 ft. Kenwood Oil Co.'s Talley 1, sd 1720 ft. Henry B. May et al's Schnider 1, elev 1666 ft, set cas 1125 ft. Miles Oil Co.'s Lawhon 1, sd 2350 ft; Chas. Ray 1, dk. Royal Pet. Co.'s Willingham 1, sd 450 ft. Swensondale Oil Co.'s Werner 1, elev 1803 ft, dr 1965 ft. Vacuum Oil et al's McMillan 2, rig. Watchorn O. & G. Co.'s King 1, ur 1995 ft.

SCHLEICHER COUNTY — Thos. Gray et al's Robinson 1, sd 3150 ft.

SUTTON COUNTY—National Potash Co.'s J. N. Ross 1, dr 955 ft.

TAYLOR COUNTY—A. J. Brown Producing Co.'s Henslee 1-A, elev 2010 ft, sd 2360 ft. Gilbert Johnson et al's Brown 1, sd 835 ft. Owen-Sloan Oil Co.'s Latimer 1, dr 2780 ft. Roeser-Pendleton et al's Butman 1, ur with hfw 3110 ft.

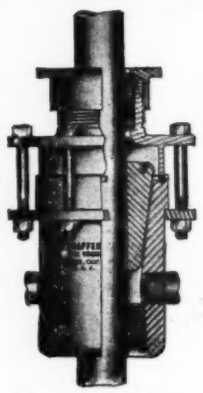
TERRELL COUNTY—Champlin Ref. Co.'s Carter 1, materials. Deep Rock Oil Co.'s Noelke 1, r rig. Humble O. & R. Co.'s University 1, dr 110 ft. Milham Corp.'s Bassett 1, ur 1275 ft.

UPTON COUNTY—Southern Crude Oil Pur. Co.'s Hobbs 1, dr 2790 ft. The Texas Co.'s Cordova Union 1, dr hfw 2671 ft.

VAL VERDE COUNTY—Magnolia Pet. Co.'s Whitehead 1, dr 5660 ft. O. O. Owens et al's Mills 1, sd 3980 ft. W. B. Thraves et al's Wilson 1, sd 905 ft.

WARD COUNTY—Selby O. & G. Co.'s Dooley-Rogers 1, dr 405 ft.

WINKLER COUNTY—Amerada Pet. Corp.'s J. B. Walton 1, elev 2833 ft, flowing wild, est 50 million ft dry gas 2409 ft. Atlantic Oil Prod. Co.'s Grisham-Hunter 2, co 3000 ft; Grisham 3, cem cas 2534 ft; Grisham 4, dr 1315 ft; Grisham 1-C, sd acct water broke in, td 2805 ft; Grisham 1-E, dr 2540 ft; Hendrick 1, fsh bit in pay 2830-2936 ft. Atlantic & J. D. Collett's Hendrick 1-F, dr 1800 ft. California Co. et al's Bashara 1, sd 3503 ft. Cranfill-Reynolds et al's Hendrick 1-B, flow oil dr pay 2845-3068 ft; Hendrick 1-C, dr 1615 ft. Eastland Oil Co.'s Hendrick 1, sd in pay 2710-55 ft acct water broke in. Gibson-Johnson et al's Daugherty 1, dk. Gulf Prod. Co.'s Hendrick 2, rig; Hendrick 8, cased off 10,000 bbls water flow 1641 ft; Hendrick 9, dr 920 ft; Hendrick 10, rig. Humble O. & R. Co.'s Grisham 1, dr 2800 ft; Grisham 3, sd in pay 2896-98 ft; Grisham 5, dr 2265 ft; Grisham 2-B, sd 270 ft. Independent O. & G. Co.'s Grisham 2, fsh in oil pay 2815 ft; Grisham 3 and 4, lcns; Grisham 5, top salt 1541 ft, dr 1820 ft; Grisham 6, top salt 1450 ft, dr 1565 ft; Grisham 7, dr 2315 ft; Grisham 8, dr 235 ft; Grisham 1-B, dr 2510 ft; Grisham 2-B, sd 485 ft; Grisham 3-B, rig. Landreth Prod. Corp. & Roxana's Hendrick 1, sd 3013 ft; Hendrick 2-A, rig; Hendrick 3-A, cem cas 2625 ft. Liner Drilling Co.'s Campbell 1, spd and sd. Llano Oil Co.'s Armstrong 1, lcn. Llano & Roxana's Scarborough 2, rig. Magnolia Pet. Co.'s Hendrick 3, dr 2635 ft; Hendrick 4, dr 2640 ft; Hendrick 5, top salt 1624 ft, dr 2420 ft; Hendrick 6, dr 815 ft. Joe Maxwell & L. C. Turman's Hendrick 1, sd for storage in pay 2879 ft; Hendrick 2, flow 800 bbls daily, dr pay 2865-2910 ft; Hendrick 3, sd storage 2585 ft; Hendrick 4, spudding; Hendrick 5, lcn; Hendrick 6, rig; Hendrick 7, cem cas 2375 ft; Hendrick 8, lcn. Murchison Oil Co. & Cranfill Bros. Oil Co.'s Grisham 2, 4 and 1-B, lcns; Grisham 3-B, cem cas 2427 ft; Grisham 4-B, cem cas 2851 ft. Republic Prod. Co.'s Grisham 2-A, rig; Grisham 1-B, (sec 41) fsh



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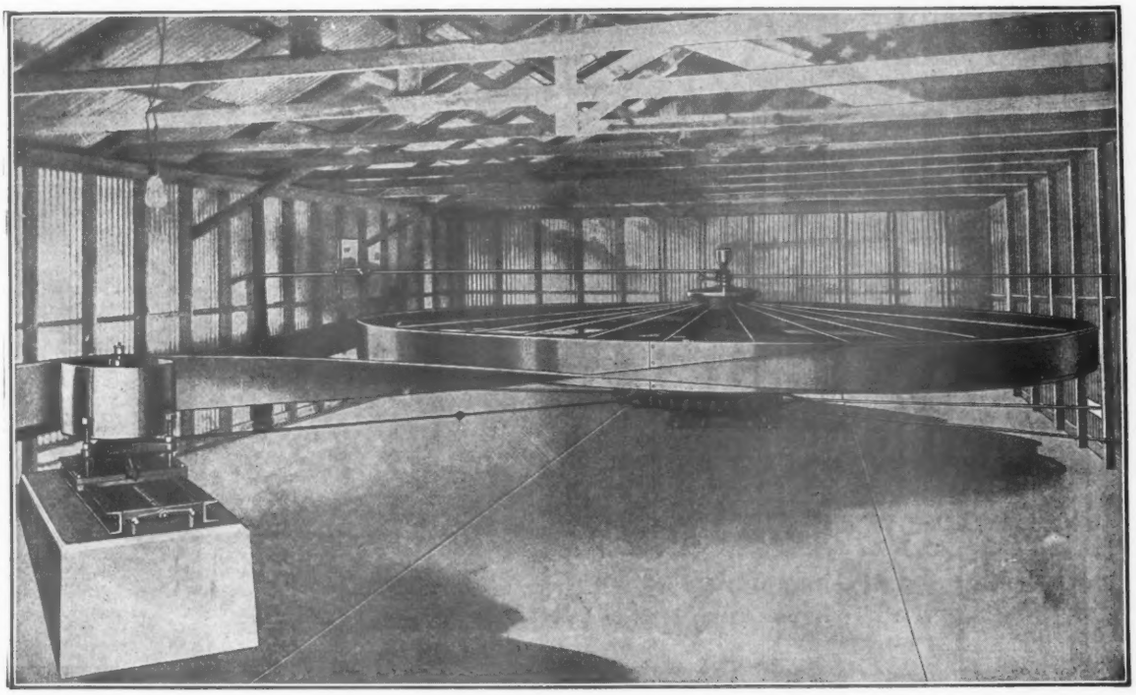

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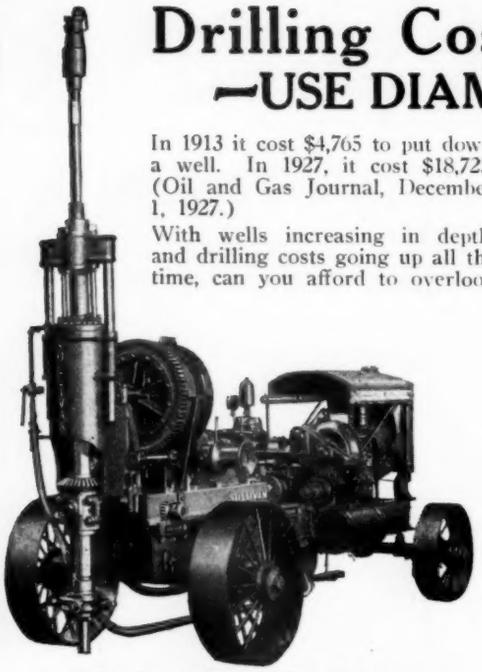

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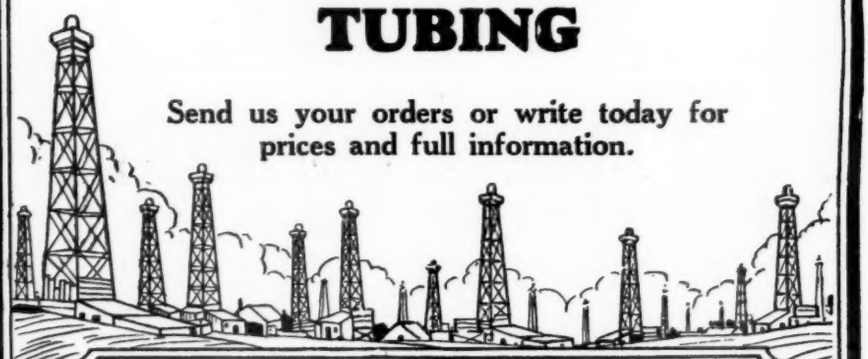

PEDEN IRON & STEEL CO.
HOUSTON – SANANTONIO – SHREVEPORT

2036 ft; Grisham 2-B, sd acct water broke in, td 2680 ft. Roxana Pet. Corp.'s Grisham 1-A, sd making oil, pay 2801-28 ft; Grisham 2-A, dr 450 ft; Hendrick 1-B, (sec 29) dr 3010 ft; Hendrick 2-B, sd 1305 ft; Hendrick 3-B, rig; Hendrick 2-C, flowed 320 bbls oil with trace water first hour, td 2989 ft; Hendrick 3-C, dr 2250 ft; Hendrick 4-C, dr 2320 ft; Hendrick 5-C, dr 1660 ft; Hendrick 1-D, making gas 2712 ft; Hendrick 2-D, dr 660 ft. Sheldon & Burden's Hendrick 1, elev 2806 ft, top lime 2610 ft, est 20 bbls daily, dr pay 2719-85 ft. Southern Crude & R. A. Westbrook's Hendrick 2-A-T-88, dk; Grisham 2-A-T-89, cem cas 2301 ft; Grisham 3-A-T-89, cem cas 2352 ft; Grisham 4-A-T-89, lcn; Grisham 2-B-T-88 (sec 4) cem cas 2659 ft; Hendrick 1-C-T-88, (sec 28) co after recov tools, td 2875 ft; Hendrick 4-C-T-88, sd acct water broke in, td 2586 ft; Hendrick 5-C-T-88, cem cas 2528 ft; Hendrick 6-C-T-88, cem cas 2528 ft; Hendrick 7-C-T-88, cem cas 2435 ft; Hendrick 1-G-T-88, lcn; Hendrick 1-H-T-88, rig; Hendrick 2-H-T-88, lcn; Hendrick 1-I-T-88, (sec 30) cem cas 2661 ft; E. G. Cummings 1-T-90, (sec 47) top salt 935 ft, dr 2100 ft. Southern Crude & Dixie Oil Co.'s Grisham 1-A-3-T-68, shut in making 75 million ft gas 2740 ft; 2-A-3-T-68, sd acct water broke in, td 2288 ft; Grisham 3-A-3-T-68, rig burned, td 2420 ft; Hendrick 1-A-3-T-67 (sec 4), sd 3072 ft; Hendrick 2-A-3-T-67, sd storage 2646 ft; Hendrick 1-B-T-67, dr 2905 ft; Hendrick 2-B-T-67, rig; Hendrick 5-C-T-67, dr 2050 ft; Hendrick 2-F-T-67, cem cas 2182 ft; Hendrick 3-F-T-67, top salt 1702 ft, dr 2585 ft; Hendrick 4-F-T-67, top salt 1800 ft, dr 2575 ft. The Texas Co.'s (was Pure Oil Co.) Grisham 2, flow oil, sd in pay 2875-89 ft; Grisham 3, dr 2710 ft; Grisham 1-B, stdz with show oil and gas 2731 ft; Grisham 2-B, sd in oil pay 2808-66 ft; Grisham 3-B, sd making gas 2860 ft; Grisham 4-B, dr 2050 ft. Grisham 5-B, dr 200 ft; Grisham 6-B, spudding; Grisham 1-C, dr 955 ft. Texon Oil & Land Co.'s Grisham 2-A, sd making above 100 million cu ft gas, td 2725 ft; Grisham 3-A, dr 2160 ft; Grisham 1-B (sec. 45) stdz 2560 ft; Grisham 2-B, dr with show gas 2610 ft. White Eagle O. & R. Co.'s Leck-Collins 1, sd 3260 ft.

EAST TEXAS
Completions

Company, Well and Location	Initial Production Bbls.	Depth
FREESTONE COUNTY—		
Roxana, Thiele 1	*	4033
HARRISON COUNTY—		
C. H. Lyon's Furrh 1, James Short sur	*	1037
RUSK COUNTY—		
E. M. Joiner et al, Bradford 1, K. Ximines sur	*	1098

ANDERSON COUNTY—Brocks et al's Henby 1, Joseph Mertz sur, dk. Humble's Spencer Clemens 3, Sessions sur, r 3976 ft; Lizzie Smith 1, Dan Roberts sur, set 12½-in at 89 ft.

CASS COUNTY—The Texas Co.'s Pruitt 1, W. G. Lissenbee sur, rig.

CAMP COUNTY—J. C. Rogers' Boyd 1, R. M. Montgomery sur, dr 750 ft.

CHEROKEE COUNTY—Humble's Elliott & Clark 1, M. Windsor sur, coring 4063 ft. Panhandle Oil Co.'s Whalen 1, J. Jordan sur, dr 1300 ft. Joe Walker et al's Barnes & DeLoach 1, Perry Reese sur, sd 976 ft.

HENDERSON COUNTY—W. K. Cayton et al's Hoffer & Nash 1, H. Jefferson sur, sd 2910 ft.

HARRISON COUNTY—J. R. Bahan's Furrh 5, J. Short sur, set 6-in at 996 ft. Doney et al's Furrh 2, J. Short sur, dk. Magnolia's Vincent 1, R. W. Bedford sur, rig. Mitchell et al's Jones 1, J. Lipscomb sur, wosr 957 ft. Thomasson et al's Timmons 2, J. Lipscomb sur, testing 946 ft. Tylong O. & G. Co.'s Vaughan 3, W. R. Anderson sur, set 6-inch at 942 ft. A. L. Waller's Bryson 4, W. R. Anderson sur, set 10-in at 105 ft.

KAUFMAN COUNTY — Cranfield et al's Nicholson 1, A. Bennett sur, sd 3250 ft.

MARION COUNTY—Lumbermans Oil Co.'s Benham 1, R. Potter sur, sd 1200 ft.

NACOGDOCHES COUNTY—P. R. Harris et al's Griffin 1, J. W. Anderson sur, dr 650 ft. Stein & Leis' Birdwell 1, Jose A. Chirino sur, sd 11 ft. Union Sulphur Co.'s Whitemark 1, Jose Chirino sur, fsh 2812 ft.

PANOLA COUNTY—Bethany O. & G. Co.'s Burns 4, W. A. Birdsong sur, set 10-in at 162

Select Your Pump To Fit Your Individual Well Conditions

D+B

Quality First PUMPS

Trying to make one type of pump serve efficiently in all wells is like trying to make one shoe fit all feet. It simply can't be done.

Twenty-one years of specialized pumping experience has proved that different well conditions require different types of pumps to insure maximum production at minimum cost. You cannot change the conditions of your well, but you can select a pump from the D & B line that is exactly suited to your well conditions.

FOUR D & B LEADERS

Regular Style: (Fig. 1). Made up so that the standing valve seats directly into the lower shoe, or collar. Fitted with a Thompson Gas Valve and Standing Valve Puller. Elimination of Garbutt Rod enables spacing plunger for as long a stroke as length of pumps permits. Location of balls and seats in plunger and standing valves eliminate gas pockets. Furnished with any number of fitting hook-ups.

Parker Style: (Fig. 2) Standing valve in long steel extension shoe, below the bottom collar. Use of extension shoe permits testing the exact fit of standing valve body as when pump is made up. Nipples of varying length give any length of stroke desired. Equipped with Garbutt Rod for pulling the standing valve.

C. & W. Style: (Fig. 3) Fitted with either a Garbutt Rod or a Thompson Gas Valve as illustrated. A combination of D & B pump and gas anchor and particularly useful where there is gas to handle. "Fit-up" shown is designed to make the fluid travel faster and prevent it from getting back around plunger.

Simplex Insert Pump: (Fig. 4) Particularly adapted to deep well pumping. Goes in and out of the well on the rods, eliminating tubing jobs. Eliminates gas locks. Prevents sand from settling. Special plunger bottom valve eliminates churning, paraffin in tubing, and B. S.

Tell us your well conditions and we will fit those conditions with a pump that will insure maximum production at minimum operating costs. A type for every pumping condition.

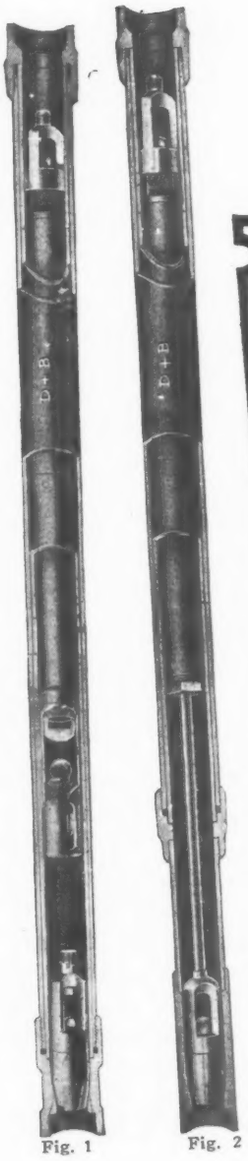

Fig. 1

Fig. 2

Fig. 3

Fig. 4

D&B PUMP and SUPPLY Co.

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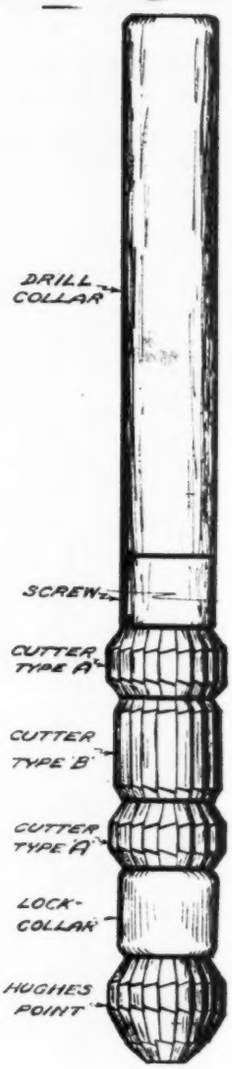
BRANCH STORES

TORRANCE. TAFT. COALDIGA BAKERSFIELD. SIGNAL HILL, HUNTINGTON BEACH & SANTA FE SPRINGS, CALIFORNIA

GRAY GRAY

GRAY
Milling Tool



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As with all other GRAY TOOLS made with precision and extreme care.

GRAY
TOOL COMPANY
HOUSTON, TEXAS.

ft; Richardson 3, J. Yarnell sur, set 6-in at 1035 ft. S. H. Gardner et al's Roquemore 1, B. C. Jordan sur, set 6-in at 2204 ft; Roquemore 2, B. C. Jordan sur, rig. H. Hines' Jones , G. Goodwin sur, rig. Magnolia's Davenport , Jessee Dunlop sur, wosr 2398 ft; Fletcher 1, B. C. Jordan sur, coring 2653 ft; Jernigan Estes 1, Lowell sur, set 8¼-in at 1970 ft; Sol Oden 1, E. F. Mitcheson sur, dr 1893 ft; Trosper 1, J. Shandoin sur, wosr 2416 ft.

RUSK COUNTY—C. M. Joiner et al's Bradford 1, K. Ximines sur, junked at 1098 ft. Magnolia's Durren 1, Agulla Norris sur, dk. McCurrie et al's Sparks 1, Jessee Coarse sur, sd 2148 ft. Rusk Dev. Co.'s & Osborne et al's Matthews 1, D. Cortinas sur, sd 2330 ft.

SMITH COUNTY—Dr. Gaither et al's Parker 1, Don Thomas Quevedo sur, sd 3251 ft.

SHELBY COUNTY—Magnolia's Pickering Lbr. Co. 1, Wm. J. Crane sur, dr 3338 ft. Wm. Sebastian's Pickering Lbr. Co. 1, T. F. Polly sur, waiting for casing 2923 ft.

SABINE COUNTY—Crater Oil Co.'s Nona Mills 2, Anthony Shoals sur, sd 3294 ft.

UPSHUR COUNTY—S. W. Richardson's Newsome 1, J. R. Davis sur, sd 2095 ft; Minor 1, A. Lowery sur, fsh 3500 ft.

SOUTHWEST TEXAS

Completions

Company, Well and Location	Initial Production Bbls.	Depth
JIM HOGG COUNTY—		
Alworth Bros., blk 7, sec 39	400	1018

CALDWELL COUNTY—Alexander & Lyles' McConnell 1, td 2240 ft. The Texas Co.'s Roebuck 1, 8 m s of Dale, dr 158 ft shale.

DUVAL COUNTY—Humble's Walsh 7, fsh 4423 ft. R. Driscoll's Fee 9 sec 23, lcn; Fee 10, sec 448, lcn. National Oil Co.'s Ball 1, sd 70 ft. Milo E. Trussell, trustees, Moody 1, ne part of sec 60, made test with Lewis tester at 2423 ft and showed 2150 ft fluid with 450 ft oil.

HIDALGO COUNTY—Queen City O. & G. Co.'s American Land & Irrig. Co. 1, n of Mercedes, fsh 2123 ft. Dale Smith's Daskan 1, dr 3235 ft shale.

JIM HOGG COUNTY—Paesano Synd.'s McCampbell 1, Vivoritas grant, dr 3030 ft shale. Miller Shaw's Jones 1, sec 381, dr 1020 ft. Hale et al's Jones 1 td 2550 ft. Hamilton et al's Holbein 1 sd 2310 ft.

VAL VERDE COUNTY—East Del Rio's Weatherbee 1, td 3200 ft. Owens et al's Mills 1, dr 4115 ft shale and sand. Magnolia's Whitehead 1, dr 5575 ft shale. Thraves et al's Wilson 1, fsh 360 ft.

WEBB COUNTY—Houston Oil Co.'s Humble lease, Cuellar grant, dr 2333 ft hard rock. J. H. Winch's Gates 1, sec 70, ru. Cole Pet. Co.'s 50-B, blk 7, sec 5, Cuellar grant, dr 2732 ft; No. 51, blk 5, sec 412, dr 90 ft.

COMPLETIONS
(Continued from page 56)

WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
CRANE COUNTY—		
Gulf Prod. Co., McElroy 45	510	2900
Magnolia Pet. Co., University-Hardwick 15	390	2878
Simms & Atlantic, University 8-D ..	1850	2963
HOWARD COUNTY—		
Magnolia Pet. Co., Kelly Chalk 9..	130	1707
Coyle-Concord Oil Co., Roberts 2..	80	1875
PECOS COUNTY—		
The California Co., Smith 5	6550	1648
Gulf Prod. Co., M. A. Smith 3....	4200	1688
Humble O. & R. Co., Smith 3-B....	1080	1460
McMan O. & G. Co., Tippett 1....	850	1450
Mid-Kansas-Transcontinental, Yates 4-C	13,200	1144
Yates 9-C	1550	960
Roxana Pet. Corp., Tippett 5	17,700	1352
UPTON COUNTY—		
Orient Oil Operating Co., Orient Fee 2	†	1445
The Texas Co., Perry 5	25	2069
WINKLER COUNTY—		
Atlantic Oil Prod. Co., Hendricks 2-D	2260	3000
Southern Crude & R. A. Westbrook, Hendrick 3-C-T-88	1200	3025

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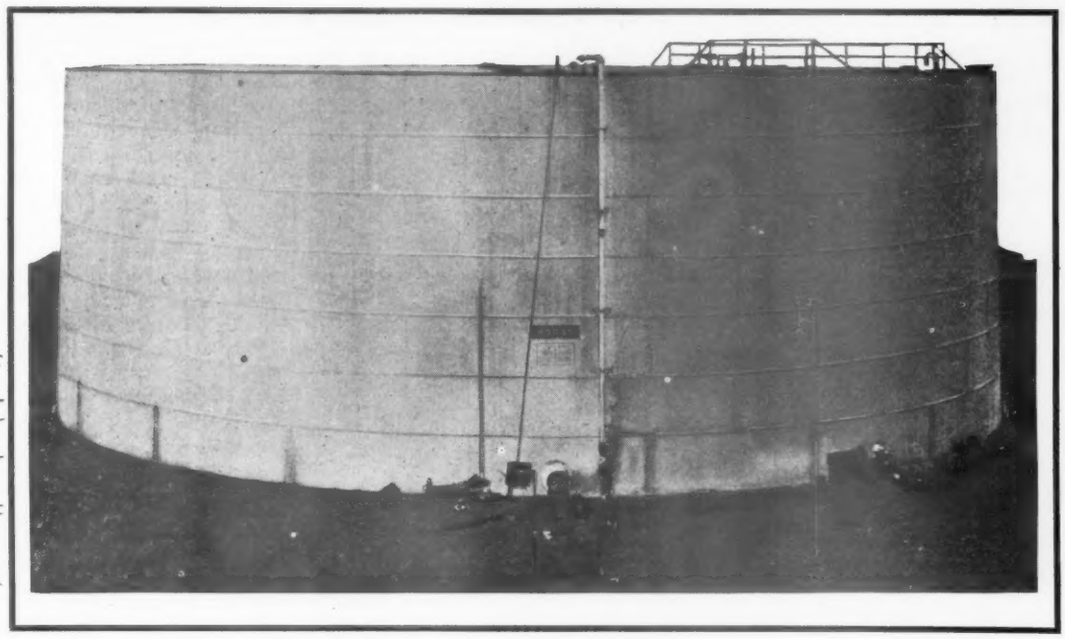


Evaporation losses won't haunt you If you store your oil under

WIGGINS ROOFS

IT is not pleasant for anyone responsible for the storage or handling of oil to think of the tremendous losses of the most valuable fractions, caused by evaporation.

But you can escape this haunting thought of evaporation losses. Tanks equipped with Wiggins Roofs practically eliminate this loss. The two types of Wiggins Roofs meet every condition of oil storage—the Breather for standing storage and the Floating Roof for working storage.

The Breather

The new Wiggins Breather provides a gastight roof which flexes up and down as the volume of vapor increases and decreases. This movement accommodates a variation in vapor volume of approximately one-third on an 80,000-bbl. tank. Under normal conditions this is ample to prevent any loss of vapor through vents. A volume relief valve is provided for releasing the vapor after the roof has reached its extreme upper position and a vacuum relief valve prevents damage to the roof when it reaches its extreme low position. These vents are operative only during filling and emptying and when the temperature is changing over a wide range as when going from one season to another.

This roof has been thoroughly demonstrated in service and is available for either new or old tanks.

The Floating Roof

The Wiggins Floating Roof has achieved its marked success through its ability to keep air away from the oil in a tank. Since it floats on the surface of the oil there is absolutely no air space under the roof whether the amount of oil in the tank is large or small.

Evaporation cannot take place unless air is allowed to come in contact with the oil. Even in so-called gastight tanks air saturated with oil vapor passes out the vent when the tank is being filled or when the temperature rises, and fresh air rushes in when these conditions are reversed. Obviously this loss is eliminated by a Wiggins Floating Roof. Splashover losses during filling are also eliminated through the provision made for releasing air which enters with the oil in the filling line. Such air passes out through vents in the roof after giving up any entrained oil.

Fire hazard also eliminated

The same features of the Wiggins Roofs which prevent evaporation losses also eliminate the fire hazard. Fire cannot reach the oil under a Wiggins Roof.

Send for information on either type of roof.

CHICAGO BRIDGE & IRON WORKS

Chicago—2463 Old Colony Bldg.
New York—3102 Hudson Terminal Bldg.
Cleveland—2234 Union Trust Bldg.
Dallas—1655 Dallas National Bank Bldg.
Atlanta—1046 Healey Bldg.
San Francisco—1051 Rialto Bldg.

FLOATING *for working storage* **WIGGINS ROOFS** **BREATHER** *for standing storage*

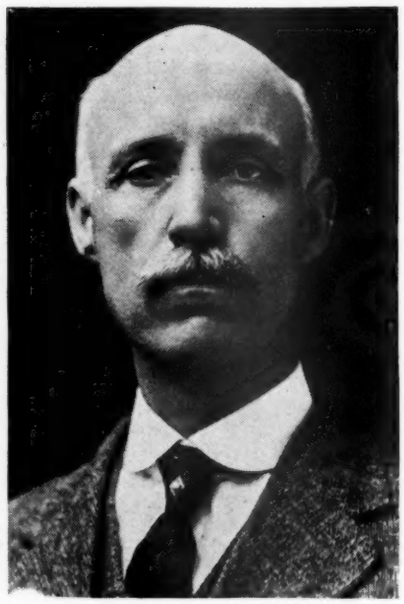
OW1-13-Gray

Maylon E. Layne Dies in Los Angeles

Los Angeles.—The passing of Maylon E. Layne, at his home here, on December 24, terminates a career of more than usual interest to the oil industry. As president of the Layne & Bowler Corporation, he pioneered the production of water on an extensive scale and devoted his life to building up a pump and oil screen organization among the most extensive in the world.

Mr. Layne was born near Ottumwa, Iowa, in 1865. At the age of 19 years he first started in the well drilling business, receiving one dollar per day for his efforts. His first experiments with well screen were made in 1887, in South Dakota, and the principle of screen construction that he discovered in those early experiments were later applied to oil wells, with the result that millions of dollars worth of screen was sold.

Speaking of his experience in the installation of oil screen, Mr. Layne said recently: "In 1901 some men interested in oil lands in Texas asked me to come down to Beaumont and see what the prospects were for drilling for oil. Almost the first thing I learned when I got to Beaumont was that one of the greatest problems the oil men had to contend with was sand. You can imagine how my enthusiasm picked up when I heard that.



M. E. LAYNE

"Throughout the oil district the theory then was that oil in sand deposits couldn't be recovered. Whenever loose sand was struck, some drillers either quit or else drilled on through, hoping to strike sand rock. One expert assured me that the oil in the sand was only stray oil seeped up from the oil supply which was supposed to be held in somewhere below by sand rock. I suggested using a screen. 'It wouldn't work,' he said. 'I tell you there isn't enough oil in the sand to make it worth monkeying with.'

"Many of the oil men had the same notion. I spent many hours trying to get a company to put in a screen and save a well that was clogged with sand. But they abandoned it and their lease was forfeited. Later, with the use of screen, millions of barrels of oil were recovered from all around that very spot."

Mr. Layne established his first factory at Houston, in 1902 and at a later date a second factory at Memphis, Tennessee.

In 1908 the Los Angeles factory was established, and at present there are 26 subsidiary companies scattered throughout the United States.

Mr. Layne wrote several books on engineering problems. In addition numerous of his articles dealing with his philosophies have been compiled in book form.

Carbon Black Plant in Montana

Billings, Mont.—R. A. Brett, president of the Argonaut Petroleum Corporation, has announced his company's intention of erecting a carbon black plant on acreage recently acquired near Billings. Contracts with Eastern rubber manufacturers have been closed and the entire potential output of a three-unit plaint is sold.

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TYPE No. 50
Rotary or Cable Tool
DERRICKS

are reliable drillers of numerous wells.

The Rotary No. 50, shown here, is drilling its fifth hole and is in condition to drill a dozen others. The shortest string of 8¼" pipe handled in the four previous wells was 3521 feet.

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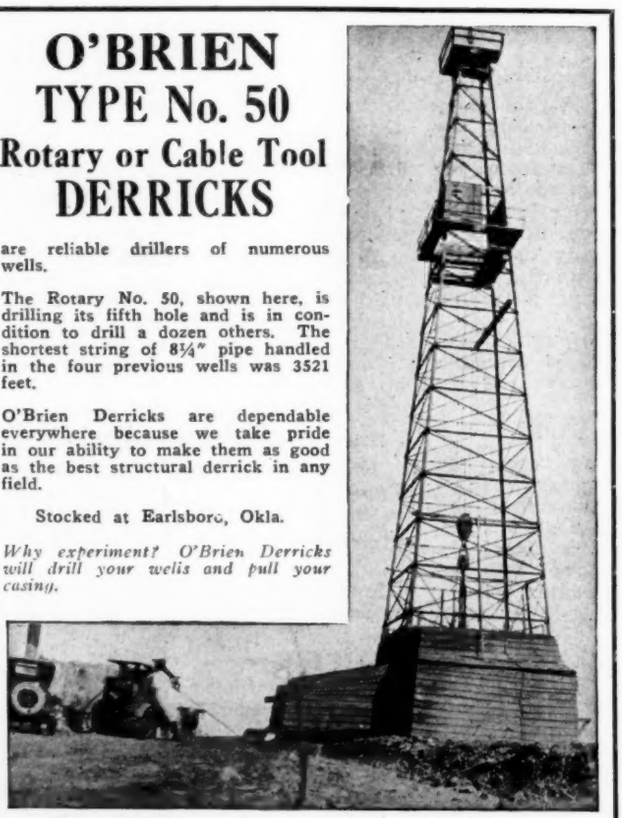

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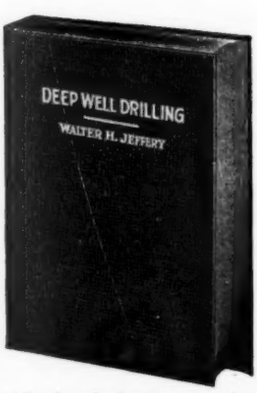
By Walter H. Jeffery



An up-to-date handbook on well drilling by the methods most generally used: cable, or standard, rotary, combination cable and rotary, and diamond drilling. Includes chapters on Geology, Use of Mud Fluid, Casing Methods, Use of Packers, Cementing, Electrical Drilling and Pumping, Shooting, Completing the Well by Modern Methods, Costs of Drilling, Strength of Materials, Etc. A valuable book for the technical school, for the student and for the driller and operator.

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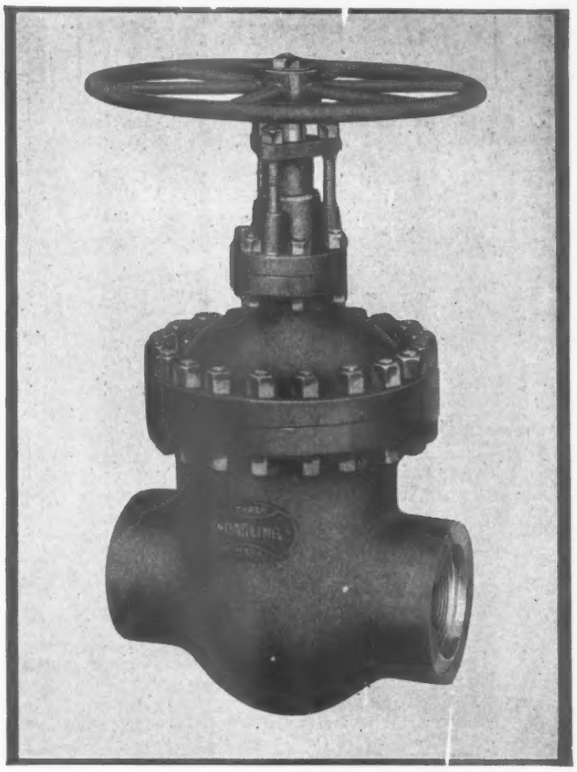

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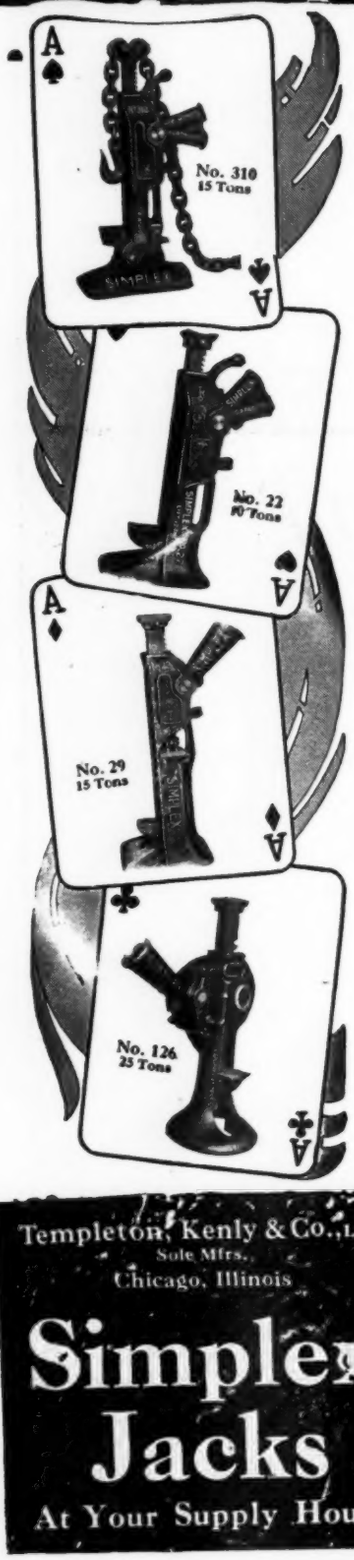

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At Your Supply House

PERMITS

(Continued from page 62)

IRION COUNTY — P. E. Hill, Mertzon, Horney 1, S 2, blk 3, H&TC sur, 150 ft from n and 450 ft from e line.

JEFFERSON COUNTY — Yount-Lee Oil Co., Beaumont, Gladys 52, blk 57, J. A. Veatch sur, 80 ft from e and 20 ft from s line; McFaddin 52, blk 1, P. Humphreys sur, 885 ft from e and 1027 ft from n line.

JACK COUNTY—J. A. Leidecker, Bryson, Moore 1, S 8, blk 2, J. M. Williams sur, 150 ft from n and 300 ft from w line. Buttram Pet. Corp., Oklahoma City, Jones 7, No. 5, S. P. Ry sur, 150 ft from n and 540 ft from w line; 8, 300 ft e of 7. Amerada Pet. Corp., Cisco, Shaw 1, M. Anderson sur, 1250 ft from nw and 2640 ft from ne line.

JONES COUNTY — Phillips Pet. Corp., Bartlesville, Okla., Pomroy 1, S 16, blk 19, T&P Ry sur, 330 ft from s and e lines.

LIMESTONE COUNTY — Why-Not & 44 Oil Co., Mexia, Rhea 2, P. Varela sur, 300 ft sw of 1; 3, 300 ft sw of 2; 4, 300 ft sw of 3; 5, 300 ft sw of 4; 6, 100 ft from n and 150 ft from e line.

LIVE OAK COUNTY—J. A. Harper 1, San Antonio, Rout 1, 1500 ft from w and 150 ft from s line.

MONTAGUE COUNTY — Pure Oil Co., Mexia, Loy 3, Wm. Donoho sur, 150 ft from w and 300 ft from s line.

MITCHELL COUNTY—Magnolia Pet. Co., Dallas, Foster 5, S 29, blk 17, T&P Ry sur, 330 ft from s and e lines.

PECOS COUNTY — Phillips Pet. Co., Bartlesville, Okla., Monroe 1, S 39, blk 194, GC&SF sur, 3020 ft from n and 1385 ft from e line. Simms Oil Co., Dallas, Smith 6, S 103, blk 194, GC&SF sur, 330 ft from n and 990 ft from w line; 5, 330 ft from e and 275 ft from s line. Bob Elmore, Fort Worth, Holmes 2, S 45, blk 1, I&GN sur, se corner. California Co., Colorado, Yates 12, S 34, blk 194, GC&SF sur, 378 ft from w and 250 ft from s line; 11, sw corner; Smith 11, S 35, 378 ft from e and 896 ft from s line; 10, 1217 ft from w and 330 ft from s line. Mid-Kansas O&G Co., Tulsa, Yates B 25, S 61, blk 1, I&GN sur, 1373 ft from s and 1140 ft from e line; 24, 929 ft from s and 630 ft from e line.

RUNNELS COUNTY — Earle K Bateman, San Antonio, Webb 1, No. 2, R. A. Smith sur, 150 ft from n and e lines. H. L. Griswold, San Angelo, Willingham 1, S 532, blk 25, Diaz sur, 150 ft from n and e lines.

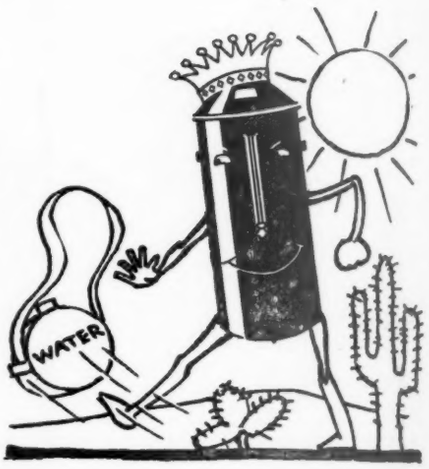
SHACKELFORD COUNTY—W. J. Cluney, Breckenridge, Burton 1, 513, TE&L sur, 450 ft from n and e lines; 2, 450 ft from nw and 150 ft from sw line. T. G. Shaw, Fort Worth, Burns 4, S 19, Bayland Asy. sur, 570 ft from w and 450 ft from s line; Reynolds 4, S 69, L. A. L. sur 150 ft from e and 300 ft from s line. E. L. Stratton, Fort Worth, Broyles 1, S 17, L. A. L. sur, 510 ft from n and 150 ft from w line. Sedwick Oil Co., Cisco, Dennis 4A, S 15, L. A. L. sur. Kingwood Oil Co., Abilene, Gorsuch 1A, S 12, blk 13, T&P sur, 220 ft s of center of n line.

STEPHENS COUNTY—Ross Drilling Co., Dallas, Vick 1, S 57, blk 5, T&P sur, 235 ft from w and 453 ft from n line.

WICHITA COUNTY—Holbrook & Woods, Wichita Falls, Kemp & Kempner 1D, blk 82, W. V. F. L. sur, 150 ft from e and 160 ft from s line. Texas Co., Wichita Falls, Waggoner 338, F. J. Cooke sur, 1988 ft from w and 230 ft from n line. C. H. Lebow, Los Angeles, Calif., Schultz 11, S 3, H&TB sur, 1250 ft from n and 1215 ft from w line. Henry Hobbs, Wichita Falls, Hodge 1, blk 39, W. V. F. L. sur, 150 ft from n and 1410 ft from e line. Pet. Prod. Co., Wichita Falls, Love B 11, blk 11, W. S. Kennard sur, 164 ft from w and 200 ft from n line.

WINKLER COUNTY—Southern Crude Oil Purchasing Co., Shreveport, La., Hendricks B2, S 44, blk 26, School sur, 990 ft from e and 2310 ft from s line; Hendricks H1, S 28, blk B5, 330 ft from w and 2310 ft from s line; Hendricks A 2, S 44, blk 26, 990 ft from e and 2310 ft from n line. Independent O&G Co., Fort Worth, Vardeman 3, S 41, blk B5, Co., Mexia, Hendricks 5, S 34, blk B5, School 330 ft from e and 990 ft from s line. Pure Oil sur, 660 ft ne of 2; 6, 990 ft sw of 2. Turman & Maxwell, Fort Worth, Hendricks 4, S

ROSCO



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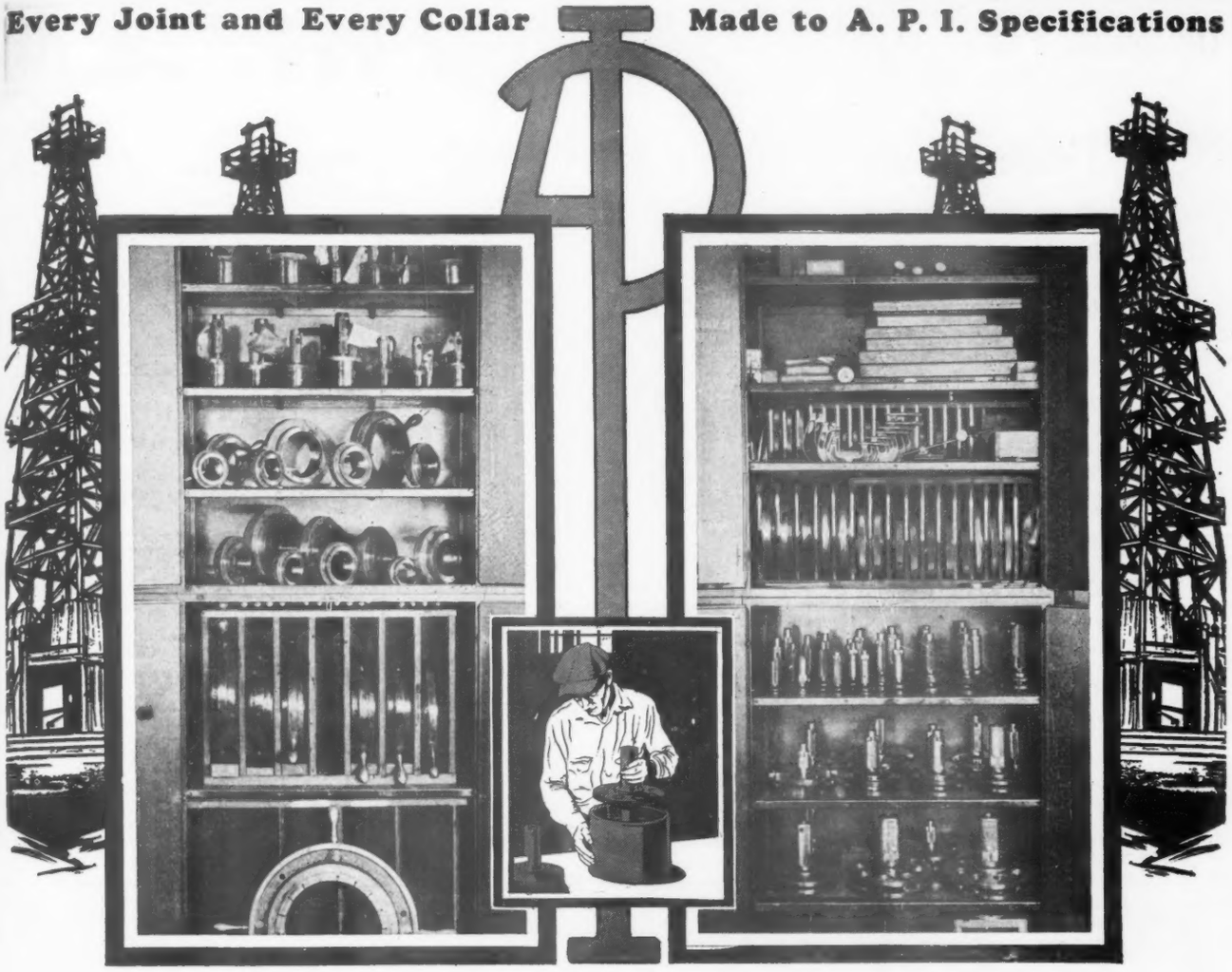

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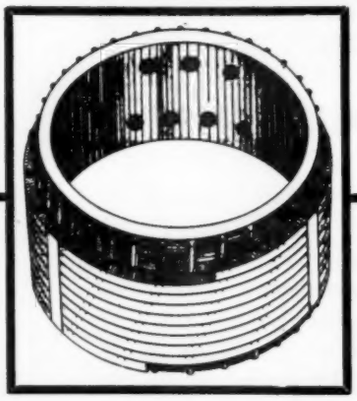

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WHARTON COUNTY — Gulf Prod. Co., Fort Worth, Chase 9, S. F. Austin sur, 150 ft se of 6.

WILBARGER COUNTY — Simms Oil Co., Dallas, Shower 1, S 20, blk 73, H&TC sur, 1354 ft from n and 168 ft from e line. Milham Corp., San Antonio, Wagoner 3C, S 57, blk 4, H&TC sur.

YOUNG COUNTY—Smor Oil Co. & Pitzer & West, Breckenridge, Robertson 1, 1577, TE&L sur, 240 ft from e and 1867 ft from s line. Robert Oil Corp., Breckenridge, Keen 5, 3401, TE&L sur, 450 ft from w and 330 ft from s line; Leberman 1, 164, TE&L sur, 750 ft from e and 150 ft from n line. P. J. White, Wichita Falls, Eddleman 1, 2693, TE&L sur, 665 ft from ne and 156 ft from se line. Paull Oil Co., Graham, Scarbrough 2, J. E. Jones sur, 200 ft from n and 750 ft from e line. Golding & Cochran, Wichita Falls, Prideaux A 15, J. Dorsey (Archer county) sur. H. B. Alexander, Loving, Johnson 1, B15, E. W. Sargent sur, 150 ft from n and w lines. G. R. Ridgeway, Wichita Falls, Waters 1, 165, TE&L sur, 450 ft from e and 150 ft from s line.

Bill Carries $75,000 for Shale Investigation

Washington, D. C.—An appropriation of $75,000 for oil-shale investigation by the Bureau of Mines is carried in the Department of Commerce money bill for the fiscal year beginning July 1, next, an increase of $25,000 over the current appropriation, provided in a deficiency bill, no funds having been provided for the work in the annual appropriation measure.

It is expected that the experimental work of the bureau at its oil shale plant in Colorado can be completed by June 30, 1929, if the funds asked are provided. By that time, it was declared by Scott Turner, director of the bureau, when he appeared before the House appropriations committee, it will be known pretty accurately what might be done in the way of producing oil from the Navy's 120,000-acre oil-shale reserve, and will guide any industrial companies which might have in mind oil-shale projects of their own.

Oil produced from shale undergoes daily changes, Director Turner's testimony disclosed, and some of that produced in Colorado will be stored at Bartlesville for a number of years in order to learn what happens to it, although it is anticipated that any change occurring will be for the worse.

The Navy, and a number of oil companies, including Standard of New Jersey, The Texas Company, Union Oil Company of California, Standard of California and Universal Oil Products, as well as General Motors Corporation and others, have taken lots of the oil for experimental work under an offer of the bureau. Reports on this will be available in about a year.

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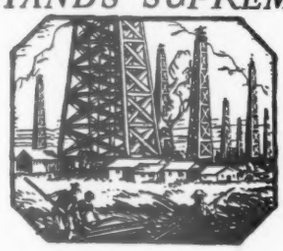

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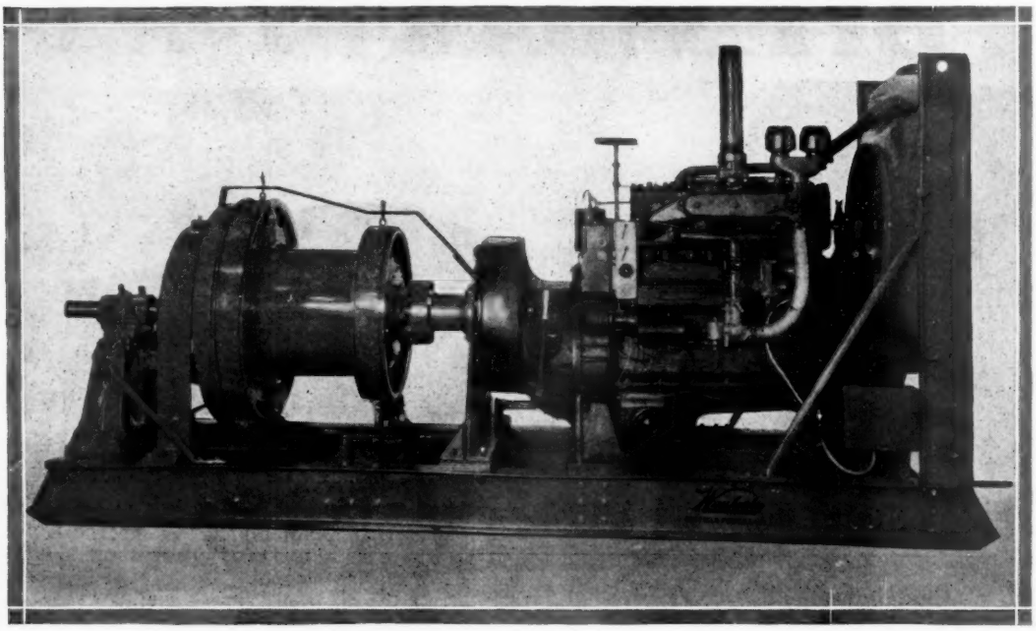

P-772-L

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Waukesha 125 H. P. Oil Field Power Units are better known from their application to rotary drill rigs than to cable tool rigs. Three years experience with the latter, however, has proved the convenient portability and flexibility of Waukesha heavy-duty multi-cylinder gasoline engines for this purpose.

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P-807-L

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PREST-O-LITE PORTABLE BLOW-TORCH OUTFIT

Portable Blow-Torch
THE PREST-O-LITE COMPANY

The Prest-O-Lite Company, Inc., 30 East 43nd Street, New York City, announces the perfection of a blow-torch outfit which can be used conveniently with a small gas tank and a six-foot length of hose.

The outfit consists of a light blow-pipe handle and a set of special tips giving flames suitable for a wide range of work.

Complete portability is a feature of the set, according to its manufacturers.

Soldering may be done either with one of the tips, or the blow-pipe may be converted into a soldering iron by slipping the soldering copper over the end of the blow-torch tip and tightening a single set screw. The internal flame maintains the right temperature.

The unit is adaptable for work on poles or underground or inaccessible places. It works equally well in any positions and can always be lighted without inconvenience, according to the manufacturers.

Further detailed information may be secured by writing the company.

"Switch Start" Motor
LINCOLN ELECTRIC COMPANY

The Lincoln Electric Company, Cleveland, Ohio, has announced a new "Switch Start" motor, built in sizes ranging from one-half to 30 horse-power, and for either two or three phase, 60 cycle current.

The motor, according to its manufacturers, is so designed that it can be started directly across the line without the use of a starting compensator or other voltage reducing mechanism.

Welded steel construction in the motor permits maximum circulation of air.

The motor is normally equipped with sleeve bearings, though ball bearings will be furnished at the customer's request.

More information will be mailed by the company on request.

Young Drilling Engine
YOUNG ENGINE CORPORATION

The Young Engine Corporation, Canton, Ohio, has placed on the market a new gas drilling engine.

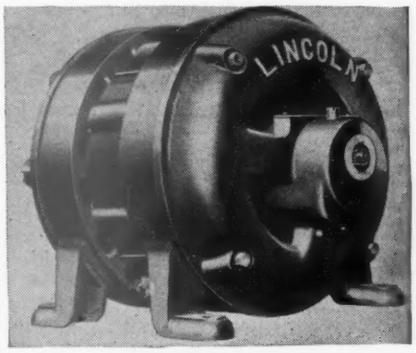
According to the manufacturer, the outfit is suitable for use either with rotary or cable tool rigs, the only change necessary being the substitution of a sprocket for the pulley used with cable tool rigs.

The complete unit consists of a Hercules four-cylinder engine, from 50 to 100 horse-power, and a speed-reduction gear having a ratio of 3.6 to 1, mounted as a unit on a heavy riveted steel base.

The engine is equipped with an electric starting motor, generator and storage battery. The engine proper is housed in a galvanized iron hood which can be locked. A cast tank radiator is a part of the equipment.

An interesting feature of the outfit is the provision made for backing the reverse pinion out of mesh with the ring gear when the engine is running in the forward direction.

Additional information can be had from the manufacturer by request.



LINCOLN "SWITCH-START" MOTOR

New Rotary Equipment
SHELDON MACHINERY CORPORATION

The Sheldon Machinery Corporation, 15 Park Row, New York, announces the perfection of new rotary drilling equipment, including rotary machines and accessories.

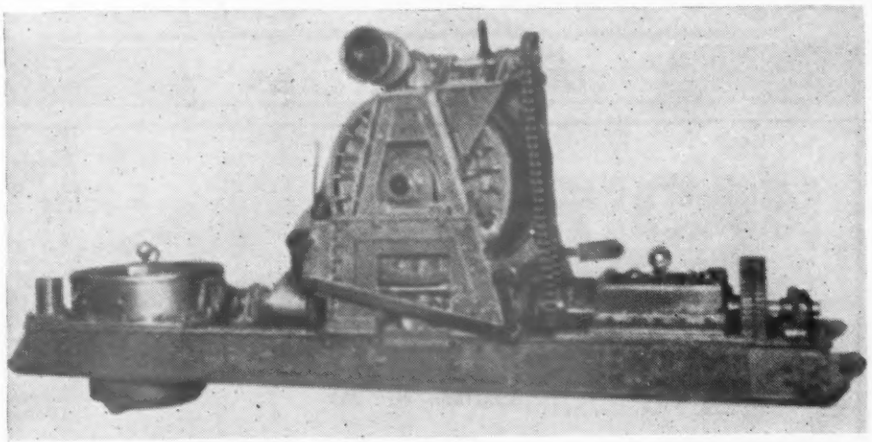
Type C hydraulic feed rotary drill is built upon a steel sled, 17 feet long by four and three-eighths feet in width, on which is mounted the rotary table, draw-works and engine.

Rotating parts are supported on heavy- duty, self-aligning ball bearings, with steel shafting and alloy cut steel gearing.

The hoist has four speeds: the high speed is connected by a friction clutch, while the low speed is positive.

The drum spools 1700 feet of seven-eighths-inch rope, and the four hoisting speeds are based on the third lap of rope on the drum, as follows: low speed, 182 feet per minute; first intermediate, 360 feet per minute; second intermediate, 400 feet per minute, and high speed, 790 feet per minute.

A shaft on self-aligning ball bearings



SHELDON MACHINERY CORPORATION TYPE C DRILL WITH TRANSMISSION FOR DRIVING WITH GASOLINE ENGINE.

drives the rotary table through a friction clutch. The table may be turned as slowly as desired, or accelerated to 300 r. p. m., a speed necessary if coring work is contemplated.

The hydraulic feed has a stroke of 24 inches up and down, and with 500 pounds pump pressure, exerts a force of 40 tons.

An automatic cathead operated by a friction clutch can be attached when desired.

The type C drill can be used with or without the hydraulic feed, since this is an attachment which fits inside the rotary table.

The machine when working as a straight rotary drives a grief stem (Kelly) by the regulation drive bushings. When it is desired to place the hydraulic in the rotary, the bushings are withdrawn and the hydraulic made up inside the rotary table. The hydraulic feed can be used either with the grief stem, or by the use of a special driving head, to rotate the flush-joint pipe. When using the grief stem, a positive grip for up and down pressure is secured by the horizontal shoulders on the grief stem and two pressure plates which are attached to the hydraulic head.

Power for the outfit is furnished by a 100-horsepower gasoline engine, or an eight by eight twin-cylinder steam engine. The steam engine runs at somewhat higher speed than the ordinary drilling engine. Its cylinders are set at 90 degrees and it has a single crank shaft. The reverse lever and throttle are combined in one control.

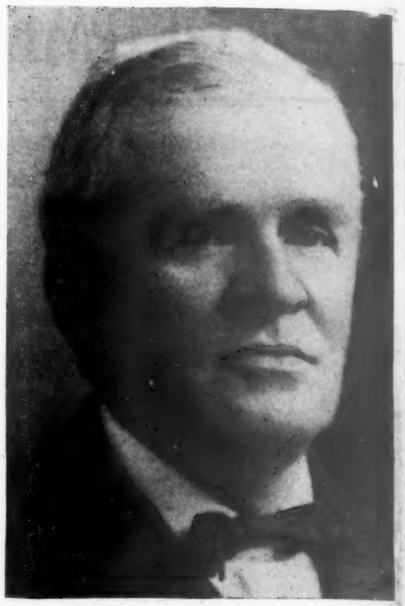
More information will be supplied by the company on request.

Superior Tube Company Expanding

Tulsa—The name of the Superior Tube Company has been changed to Superior Tube Company, Inc. This is the result of a plan of recapitalization and a program of expansion.

The change became effective January 2, when the following officials were re-elected: Hoyle Jones, president and treasurer; J. D. Holloway, vice president and secretary; D. E. Hubbard, assistant secretary and assistant treasurer.

Headquarters of the company will be in the new Philtower building here after April. The company is now quartered in the First National Bank Building.



O. M. CARTER

O. M. Carter Dies at Houston Home

Houston—O. M. Carter of this city, known in the oil industry as the inventor of the Carter Collapsible Rotary Bit, died at his residence, 1320 Heights Boulevard, on Friday, January 6, after a brief illness. Mr. Carter was 86 years old at the time of his death. He leaves a fortune valued at several million dollars.

He was born in Salem, Massachusetts, and started early on his long and successful business career, his first venture being the establishment of a hardware store in Ashland, Nebraska. His earlier activity also included mining for gold in Colorado. For 20 years he engaged in the hardware business in Omaha, Nebraska, his first great success. He was interested, financially, in various banks in Nebraska at that period, and served as president of an Omaha bank. Thirty-eight years ago he came to Houston, and since that time he was connected with dozens of enterprises here, one of his outstanding achievements being the purchase of about 1800 acres of virgin pine forest on the outskirts of Houston in 1892, and the subsequent division of the land into 10,000 residence lots, most of which were sold. This section is known as Houston Heights and now has a population of about 35,000 persons.

Not many years ago, when Mr. Carter had already reached an advanced age, his creative mind busied itself with a new idea—which resulted, after eight years of intensive research and experimentation in the invention of the above mentioned collapsible rotary bit, which is now being manufactured and sold through organizations which Mr. Carter worked out. The outstanding feature of the bit is that it can be taken out of the hole and replaced without having to pull the drill stem.

Mr. Carter's body was taken to Denver, Colorado, for burial. He is survived by his widow, one son, and three daughters.

BUY USED PIPE

And Save the Difference

75,000 ft.	2" used line pipe	15,000 ft.	5-3/16" used casing
75,000 ft.	3" used line pipe	15,000 ft.	6-5/8" used casing
30,000 ft.	4" used line pipe	5,000 ft.	8-1/4" used casing
20,000 ft.	6" used line pipe	5,000 ft.	10" used casing
10,000 ft.	8" used line pipe	1,000 ft.	12½" used casing

Three complete strings Standard Drilling Tools.

150 tons 60 lb. No. 1 relaying rails.

We buy abandoned pipe lines and oil wells. If you have any to sell, communicate with us before you dispose of them.

BRANCH STORES

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HOLMES BUILDING
FORT WORTH, TEXAS

Equipment Supplies

For Oil Field Representation

MARACAIBO AGENCIES

Apartado No. 263

MARACAIBO VENEZUELA

ANOTHER "UNITED" EXHAUST PIPE AND PIT INSTALLATION!

THE illustration above shows a battery of "United" exhaust pipes and pits installed for a large Mid-Continent natural gasoline manufacturer. Notice the explosion doors on top of the conical roof. Also notice the stack which carries the fumes from the pit upward into the air.

We would be glad indeed to show you where "United" exhaust pipes and pits would be of great advantage to you. Write us today.

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"UNITED" FOR SERVICE

RELIEF VALVES

American Hydraulic Relief Valves in the pump house of Empire Pipe Line Co., Lima, Oklahoma

American Valve No. 36553. This valve has just been returned to the factory for replacement of the spring. It was originally shipped in October, 1895. And yet, after 33 years of service it is still in good condition.

For Air Lift, Pump Service or for Pipe Lines, American Relief Valves will give you years of satisfactory service.

Write for the following Catalogs:

- Gauge Catalog A-25
- Recording Gauge Catalog E-25
- Valve Catalog V-25
- Thermometer Catalog F-25
- Dial Thermometer Catalog G-25
- Recording Thermometer Catalog H-25
- Temperature Controller Catalog R-25

AMERICAN INSTRUMENTS

AMERICAN SCHAEFFER & BUDENBERG CORP.

338 Berry St., Brooklyn, N. Y.
BRANCHES IN PRINCIPAL CITIES

Makers of American Industrial Instruments Since 1851

DUNN TOOLAGRAM

How Fast is Fastest?

We all know how fast the hare can run. But that wasn't fast enough for the darky who was trying to get out of the way of a flock of shot trailing after him.

When we say Dunn Safety Elevators are fast, boy, we *mean fast!* If you want to know how fast that is, try one at our risk. It will give you a new idea of speed.

Made in all sizes for casing, drill-pipe, tubing and sucker-rods.

Any size or type sent on approval.

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OXNARD, CALIFORNIA
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Export Sales Office ..... 150 Broadway, New York City

SQUEAKS FROM THE BULL WHEEL

Kind Old Man: "And do you know why Santa Claus didn't bring you anything, little girl?"

Doll-Faced Child: "Yes, damn it, I trumped father's ace in a bridge game on Christmas Eve."

Judge (to officer who has arrested a man for not wearing any clothes)—"What is this man charged with?"

Officer—"Impersonating a woman."

Wife: "If I were to die what should you do?"

Husband: "Oh, the same as you would yourself."

Wife: "You wretch! I have always suspected it."

He: "This dollar down and two a week system is surely selling a lot of goods."

She: "Yes, I saw a girl yesterday on the street who looked as if she was wearing the first instalment."

Teacher (in grammar class): "Willie, tell me what it is when I say, 'I love, you love, he loves'—"

Willie: "That's one of them triangles—where somebody gets shot."

It was married man's night and the minister had asked that every one who had domestic worries stand up.

"Ah!" exclaimed the minister, peering at the lone man who had remained seated, "you are one in a million."

"It ain't that," piped the voice as the rest of the congregation gazed at him suspiciously, "I can't get up. I'm paralyzed."

"Oh, mother, there's a murderer in the basement!"

"Foolish child! What makes you think so?"

"I just heard the gardener tell the butler, 'We might as well kill the other one'."

"What kind of cigars do you smoke?"

"Ah smokes Robinson Crusoes."

"What kind is them?"

"Castaways, dumbbell, castaways!"

Insurance Agent: "Yes, sir, if your premises are burned down we pay you the money immediately."

Client: "And do you make any inquiries?"

Insurance Agent: "We make the most careful inquiries."

Client: "Ah, I thought there was a catch in it somewhere."

Did you know that women were in politics many thousands of years ago?

No; where did you get that?

Well, it is stated that Salome's motion was received by the house with loud applause.

An American was fined for being drunk. When he paid his money he asked for a receipt, which was refused.

"Judge," said the man, "do you believe in a day of judgment?"

"Yes," replied the Judge.

"Well," said the other, "on that day it will be said to me, 'Jacob Smith, you got drunk.' 'Yes,' I will answer, 'and I paid my fine.' 'Where's your receipt?' it will be said; and do you think it reasonable, Judge, that I should be obliged to lose my time by going down and look all over hell for you and your clerk?"

George: "Jim, dat bear sho do have funny looking eyes. What am his name?"

Jim: "Dat bear's name am Gladly."

George: "Gladly! How come?"

Jim: "Got it from de Bible, George, where it says, 'Gladly de cross I bear'."

"Why did you strike the telegraph operator?" the judge asked the negro.

"Well, yo' honor," said the culprit, "I hands him a telegram for my girl an' he starts readin' it. So I just nachully up an' hands him one."

"Before he married me, he said he'd move heaven and earth for me."

"And then?"

"Oh, now he's raising hell."

"Why does cream cost more than milk?"

"It's harder for the cows to sit on the smaller bottles. "

"Isn't this good chicken?"

"It may have been morally, but physically it's a wreck."

Sandy Junior—"Ye promised to gie me saxpence if I was top boy at school. I've been top boy for two weeks running."

Sandy Senior (reluctantly)—"Well, here's a shilling, but ye must give up studying so hard—it's not good for ye."

Nervous Youth—"Darling, you are the breath of my life."

Fair One—"Well, why don't you hold your breath?"

License was issued for the marriage of Ebenezer Sweet and Jane Lemon.

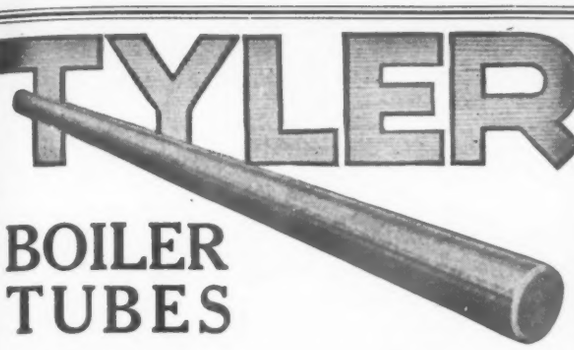
The inquiring reporter who got hold of the copy had a rhyming as well as insquiring instinct and he wrote it up:

"Behold how great extremes to meet
In Jane and Ebenezer;
Fo Jane's no longer sour but sweet
And Eb's a lemon squeezer."

"And how would you like the pockets, sir?"

"Weel—just a wee bit deeficult to get at."

TYLER



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Resist corrosion—

Whether it is charcoal iron tubes for bad water conditions or lap-welded steel tubes for good water conditions—Tyler Boiler Tubes will give *lasting* satisfaction.

All tubes are made to A.S.M.E. Code Requirements.

Request full details

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The Bourne-Fuller Company, Cleveland, Ohio.
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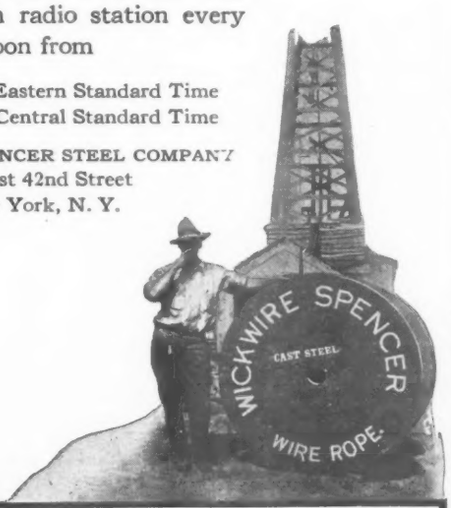
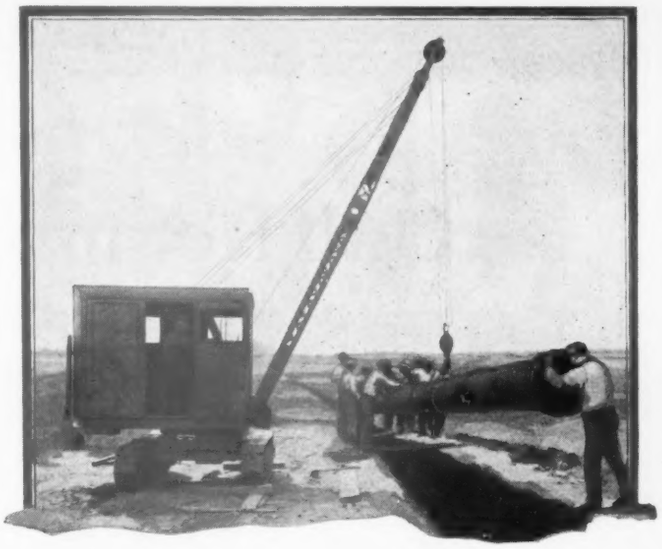


WICKWIRE SPENCER STEEL CO.

V. E. BAUM, *Petroleum Engineer*
MURRAY TOOL & SUPPLY CO.
222 East Brady Street, Tulsa, Okla.



Easy on the gang!

Picks them up, lays them down and buries them—*a mile a day*

The heavy, time-killing, costly work of pipe line laying is all done quickly and inexpensively with this sturdy little Buckeye.

A prominent Tulsa pipe line contractor declares that it replaces 24 men. A Dallas contractor says he lays and "stabs" a mile of 20-inch pipe daily with it, welding three 20-foot sections on the bank and lowering them all together—that's a 6000-pound load.

Model 0 Backfiller-Crane Costs Only $4,750

It handles loads that will surprise you. It backfills quickly and, because of its full circle-swing and speedy traction, it covers a wide working radius.

Having the same superior construction as the famous Buckeye pipe line ditchers, it will render equally satisfactory service.

Considering the number of men it will replace and its economical operation, the initial cost (f.o.b. factory, without bucket or cab) of Model 0 is saved after a few months' use.

Write for our new descriptive and illustrative bulletin.

The Buckeye Traction Ditcher Company ~ Findlay, Ohio

There's a Buckeye Sales and Service Office Near You.

Buckeye FOR OVER 30 YEARS

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